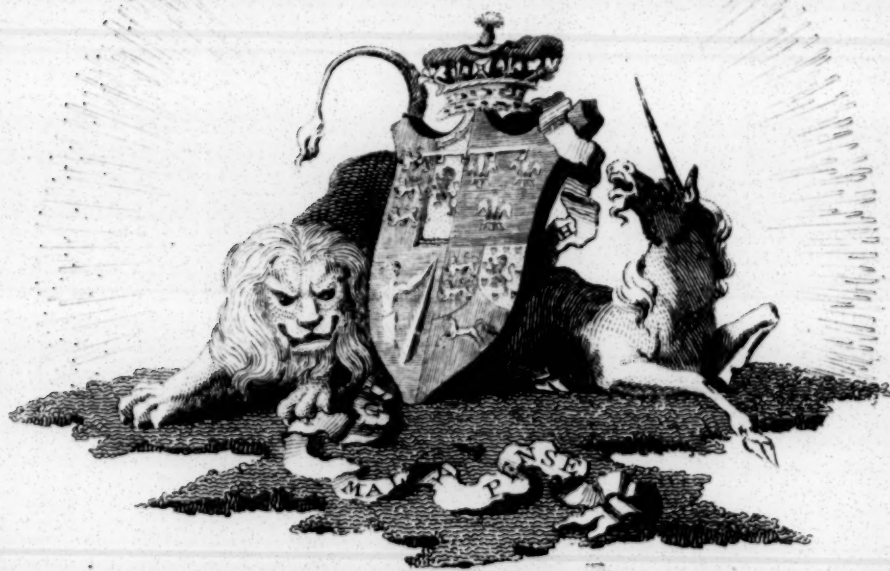


H. Maskell

THE
Habitable World
DESCRIBED.
VOL. II.

Inscribed by Permission to
His Royal Highness Frederick
DUKE OF YORK, &c. &c.



L O N D O N:
Published as the Act directs, by the Author,
N^o 14, Red-Lion-Street, Clerkenwell.

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T H E
HABITABLE WORLD
DESCRIBED,

OR THE PRESENT STATE OF THE PEOPLE IN ALL PARTS
OF THE GLOBE, FROM NORTH TO SOUTH;

S H E W I N G

The Situation, Extent, Climate, Productions, Animals, &c. of the
different Kingdoms and States;

Including all the new Discoveries:

T O G E T H E R W I T H

The Genius, Manners, Customs, Trade, Religion, Forms of Govern-
ment, &c. of the Inhabitants, and every thing respecting them,
that can be either entertaining or informing to the Reader, collected
from the earliest and latest Accounts of Historians and Travellers
of all Nations;

With some that have never been published in this Kingdom;

And, nothing advanced but on the best Authorities.

W I T H

A great Variety of MAPS and COPPER-PLATES, engraved in a
capital Stile, the Subjects of which are mostly *new*, and such as
have never yet been given in any English work.

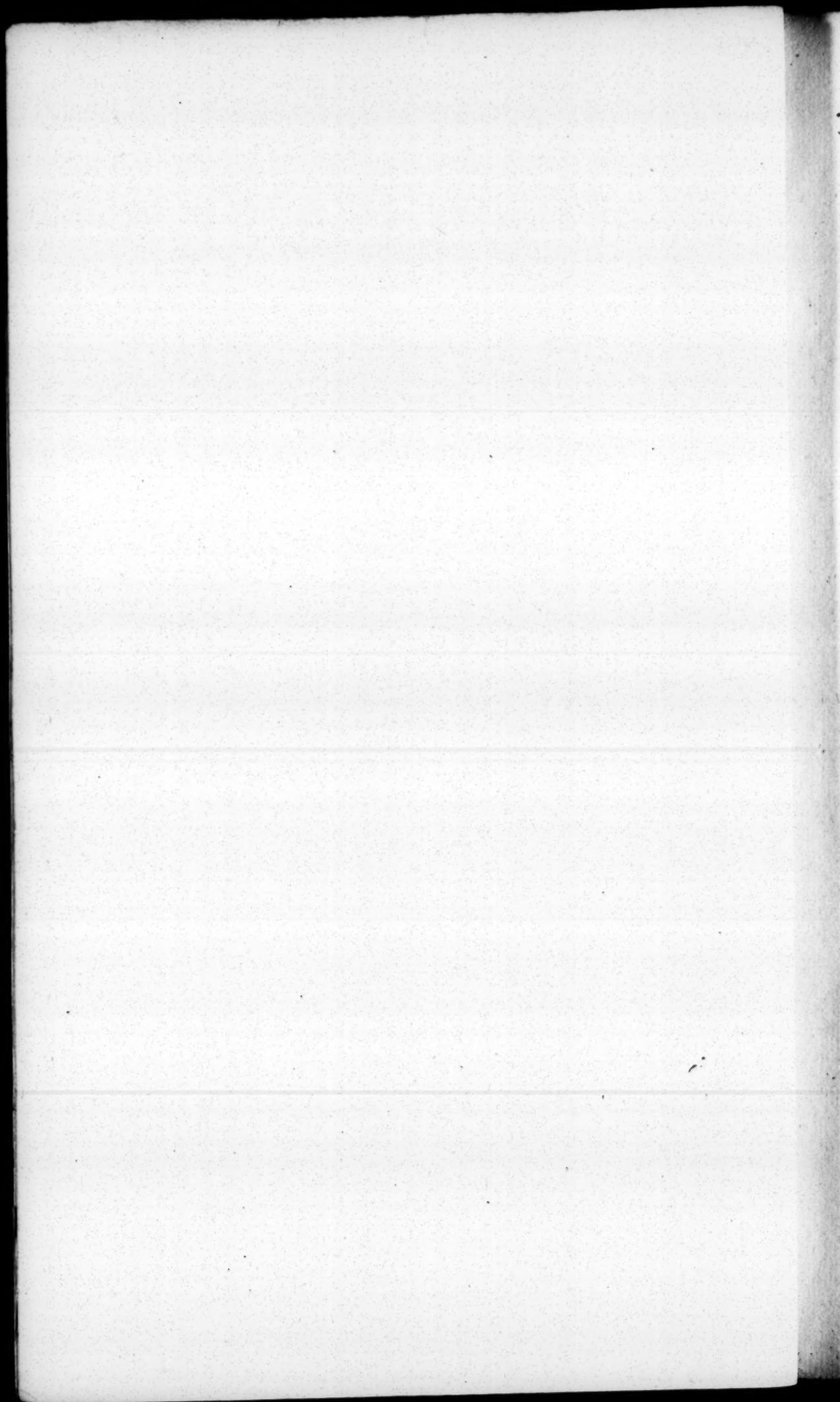
BY THE REV. DR. JOHN TRUSLER.

VOL. II.

L O N D O N.

Printed for the AUTHOR, at the Literary-Press, No. 14, RED-LION-
STREET, CLERKENWELL; and sold by all Booksellers.

M D C C L X X X V I I I.



ADVERTISEMENT.

A Number of the subscribers to this work having signified a wish that PALLAS'S Tour should be inserted in the manner in which it was originally printed, we trust the remainder of them will be equally pleased at our doing it; for, though it deviates from that uniform, systematical arrangement we began with, yet, as this tour is novel and curious, will be printed so as to be distinct from the rest of the work, and as, when the tour is completed, we shall resume our former method, and treat of Russia as we have done of Norway, &c. those who wish to preserve that uniformity, may separate this part of the work from the rest, and not bind it up with it.

These travels were printed at Petersburg, in the German language, and consist of five quarto volumes, but as the chief part of these volumes is rather an enquiry into the natural history of the country, and as such would be tedious to the general reader, particularly so to an English one, we have omitted what is dry and uninteresting; though at the same time we have followed our author throughout his tour, and laid his

journal before our reader, as he himself has done in the original. Such parts indeed of his natural history, as we thought might be entertaining and useful to the many, we have preserved, omitting none, but those physical enquiries into the nature of the country he travelled through, and which he was sent out to explore, in order to discover what parts of Tartary and Siberia were worthy colonization. Where Dr. PALLAS has passed over descriptions of people, their manners and customs, such having been given to the world, by other Russian travellers, as they may not have fallen in the way of our readers, we have endeavoured to supply the deficiency from those authors; but have pointed the passages with turned commas, that Pallas's account may stand unmixed and not mistaken for the accounts of others.

THE

The AUTHOR's PREFACE

TO THE FIRST PART OF HIS TOUR.

THE commands of her Imperial Majesty to the Royal Academy of Sciences at *Petersburg*, issued some few years back, for the benefit of science, and the preparations made in consequence, are too well-known to the world, to be here repeated. I had the honour of being numbered among those, who were to carry those commands into execution. By the plan first designed, the natural curiosity of the public would not have been gratified, it being proposed not to publish any part of this tour till the return of the gentlemen engaged in it: but, that love of science, which is one of the great ornaments of *Count Orlov*, director of the academy, induced him to gratify the literary world, by forwarding the publication of these travels.

This first part of my journal contains an accurate, but unstudied account of the most important observations, in the first two years of my tour. Without labouring to enhance the value of these sheets, by dwelling on the pains I have taken, I shall only say, that I paid the greatest attention to every thing I met with, and I hope my work, though destitute of the embellishments of language, will not be classed among the
number

number of trifling and superfluous accounts. Descriptions of unknown countries, like the greatest part of those I have travelled through, must be entertaining to the enlightened reader, let the stile be as indifferent as it may. The characteristic of a book of travels is the fidelity of the narrative. What fell under my own observation, I have been particularly exact in, and in those accounts I received from others, I have endeavoured to keep close to truth. Had I had more leisure, I might have been more ample in my remarks; but, as the business of my journey, did not allow me more than two months, to review my papers and arrange them for the public eye, I trust, they will meet with indulgence.

I must not omit saying, that I have not entered into a very descriptive detail of places situated near capital cities, as I would not dwell on things well known already; for this reason, in my description of some parts of the government of Orenburg, I have profited by the topography of that place, written by Mr. *Rytischloff*.

I must further add, that I was directed to measure my journey by the Russian *Werst* or *Verst*, which is equal to 500 fathoms, each fathom seven feet English; of course, a *Verst* is about three-quarters of an English mile; and, with respect to weight, I have used the Russian *Pud* of forty pounds, which is equal to thirty-six pounds English.

Ufa. April 28, 1770.

T R A V E L S

I N T O

Siberia and Tartary,

PROVINCES OF THE RUSSIAN EMPIRE.

By S. P A L L A S, M. D.

PROFESSOR OF NATURAL HISTORY, &c.

Taken by order of the Empress of Russia, under the direction of the Imperial Academy of Sciences at *Petersburg*, in 1768, 1769, 1770, 1771, 1772, 1773, and 1774, and now first translated into English.

PART I.

JUNE 21, 1768. Certain business and the necessary preparations for our journey delayed us till towards the end of June. However, at last, being properly equipped, *Messrs. Lepechin* and *Guldenstedt*, gentlemen, who were appointed to accompany me throughout my tour, set out, one rather before the other, and

and I followed with my attendants on the 21st of June. The inspection of certain places on this side of Moscow, was allotted to these gentlemen, and I was ordered to Astrachan; my shortest road therefore was to pursue my way to Moscow, and to make all the possible speed which my heavy baggage and a change of horses only every 50, 60, or 70 versts would allow, in order to reach the distant parts I was going to, in a favourable season.

My journey was chiefly that of a botanist and a mineralogist, of course, my attention was mostly taken up with examining the soil and the plants of the countries through which I passed, but as a description of these would be tiresome to the general reader, I shall omit noticing them here, and speak only of the face of the country, the towns and the people, in the places where I went.

July 2. On the 2d of July I found myself at Twer, about 388 English miles from Petersburg, from whence we first set out. This was a few years back, a miserable wretched village, consisting only of a few poor huts, but is now, under the patronage of the Empress, raised to an elegant stately city. It stands on the banks of the river Wolga, in which a great deal of fish is caught and conveyed in well-boats to Moscow and Petersburg, by the river Oka.

The

The fields here are well cultivated, and the place seemingly every where in a flourishing condition.

‘Twer,’ says Mr. Cox, who travelled with Lord Herbert, in 1778, is divided ‘into the old and new town. The former is on one side of the Volga, and consists almost of wooden cottages; the latter, about fifteen years ago, was little better; but being, in 1763, fortunately destroyed by fire, it has risen with lustre from it’s ashes. The Empress, no sooner informed of this calamity than she, ordered a regular and beautiful plan of a new town to be sketched by an eminent architect, and enjoined that all the houses should be re-constructed in conformity to this model. She erected at her own expence, the governor’s house, the bishop’s palace, the courts of justice, the new exchange, the prison, and several other public edifices, and offered to every person who would engage to build a house with brick, a loan of £300. English, for twelve years, without interest. The money advanced on this occasion was £60,000, and she has since remitted one-third of the sum. The streets, which are broad and long, issue in a straight line from an octagon in the centre. The houses of this octagon, and of the principal streets are of brick, stuccoed white, and form a very magnificent appearance. This town is not yet finished, but when completed, will consist of two octagons, with several

VOL. II. B streets

‘ streets leading to them, and intersecting each other
‘ at right angles.’

‘ Here is an ecclesiastical feminary under the in-
‘ spection of the bishop, and admits 600 students, a
‘ school of 200 burgher’s children, and an academy for
‘ the education of the young nobility, admitting 120
‘ scholars. The city is a place of considerable com-
‘ merce, and the river is covered with boats. It owes
‘ it’s principal trade to it’s advantageous situation, be-
‘ ing near the conflux of two rivers, along which are
‘ conveyed all the goods and merchandize sent by
‘ water from Siberia and the southern provinces, to
‘ Petersburg.’

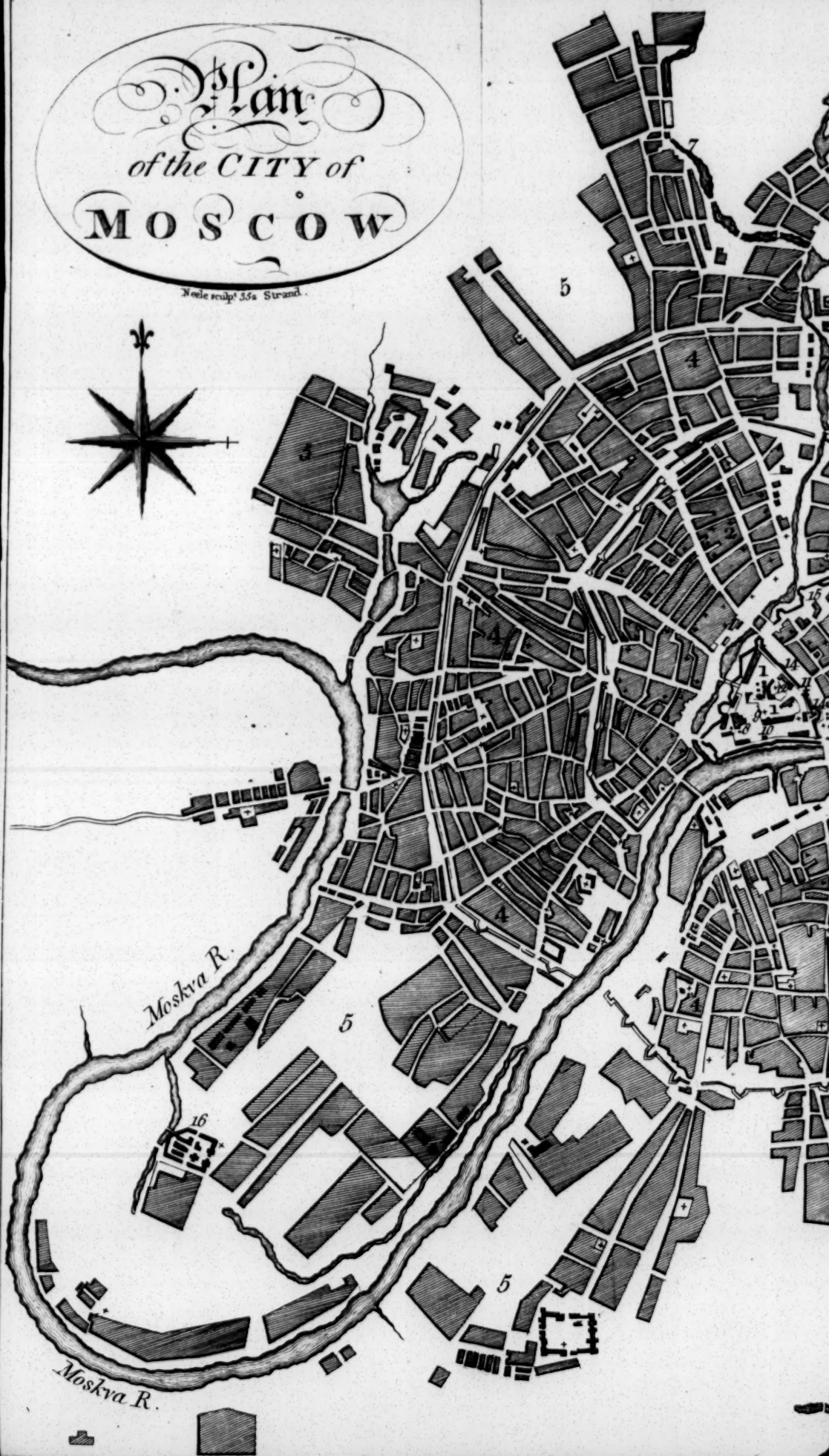
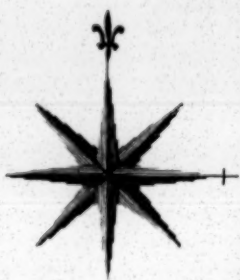
‘ The Volga, which is the largest river in Europe,
‘ rises about eighty miles from Twer, and begins to
‘ be navigable a few miles above the town. It is
‘ there, about the breadth of the Thames at Henley,
‘ but exceedingly shallow; when it joins the Twerze
‘ it is broader, deeper and more rapid. The rising
‘ spirit of commerce, within these few years, has en-
‘ creased the people much; they are about 10,000 in
‘ number. The city lies in the middle of a large
‘ plain, and the country, round, produces in great abun-
‘ dance, wheat, rye, barley, oats, buck-wheat, hemp,
‘ flax, and all kinds of vegetables. It’s forests
‘ yield oak, birch, alder, poplar, mountain-ash, pines,
‘ firs, junipers, &c.’

‘ *Moscow,*

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Plan
of the CITY of
M O S C O W

Neale sculp^t 35a Strand.





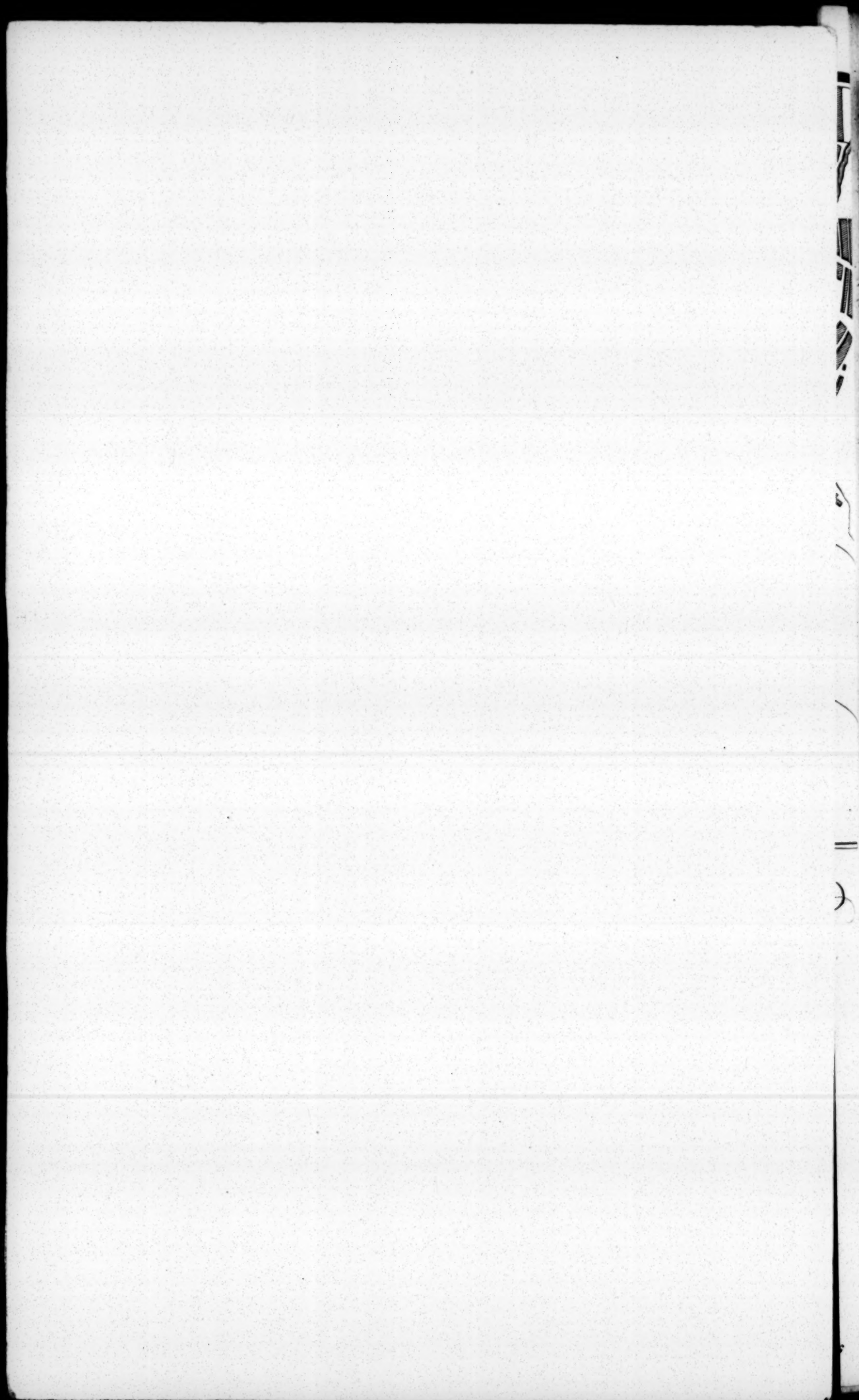
One English Mile

1 Verst

100 Paces

References

- 1 Kremlin
- 2 Bielgorod
- 3 Khitaigorod
- 4 Semlainigorod
- 5 The Suburbs.
- 6 Yausa R.
- 7 Neglina R.
- 8 The Antient Tzar's Palace
- 9 Church of the Assumption of the Virgin Mary
- 10 S.^t Michael's Church
- 11 Church of the Holy Trinity
- 12 Tschudof Convent
- 13 Church of S.^t Maximus
- 14 Exchange
- 15 Printing Office
- 16 Devitz Nunnery
- 17 Site of the New Palace & Gardens
- + Churches & Chapels



Moscow, July 14. From Twer, we went to Moscow, about the distance of 125 miles, where I was detained till the 14th of July. The river Moscow, on which the city stands, is remarkable for the quantity of petrified sea-substances, every where found in the environs of this place, some inches deep in the banks. Here are also some physic-gardens, and pains have been taken to cultivate the genuine rhubarb. A large field has been sown with it, and there is little doubt, as it seems to thrive in this climate, but, that with proper attention, they will bring it to such perfection, as to exceed that of the Chinese. Experiments have been made of it in Scotland. Choroschowa, a village not far from Moscow, belongs to the crown, and is renowned for it's breed of horses.

‘ The city of Moscow,” says Mr. Cox, ‘ lies in
 ‘ the form of a crescent, stretched to a prodigious
 ‘ extent, and innumerable churches, towers, gilded
 ‘ spires and domes, white, red and green buildings
 ‘ glittering in the sun, form a most splendid appear-
 ‘ ance, and yet these are strangely contrasted by an
 ‘ intermixture of numberless wooden hovels. We
 ‘ crossed the river Moscow on a floating raft, fastened
 ‘ to each bank, which the Russians call a living bridge,
 ‘ from it's bending under the carriage. This city is
 ‘ certainly the largest in Europe, it's circumference,
 ‘ within the rampart which encloses the suburbs, being
 ‘ exactly thirty-nine versts, or twenty-six miles, (nearly

‘ equal to that of Pekin in China, which including it’s
‘ suburbs, measures twenty-six miles and three-quar-
‘ ters,) but it is built in so straggling and disjointed a
‘ manner, that it’s population in no degree corresponds
‘ with it’s extent; it is calculated to have 277,535
‘ inhabitants. The streets are in general exceedingly
‘ long and broad, some paved, others, particularly in
‘ the suburbs, are formed with trunks of trees, or are
‘ boarded with planks like the floor of a room;
‘ wretched hovels are blended with large palaces, and
‘ cottages of one story stand next to the most superb
‘ and stately mansions; many brick structures are
‘ covered with wooden tops; some of the wooden
‘ houses are painted, others have iron doors and roofs.
‘ The churches are built in a peculiar stile of archi-
‘ tecture, some have domes of copper, others of tin,
‘ gilt or painted green, and many roofed with wood.
‘ In a word, some parts of this vast city have the ap-
‘ pearance of a sequestered desert, other quarters, of a
‘ populous town, some of a contemptible village, others
‘ of a great capital.’

‘ The river Moscow, from which the city takes it’s
‘ name, flows through it in a winding channel, but
‘ excepting in spring, is only navigable for rafts. We
‘ hired, says Mr. Cox, a carriage, during our stay at
‘ Moscow, it was a chariot and four horses of different
‘ colours, we could get no other; the coachman and
‘ postillion were dressed like the peasants, with high
‘ cylindrical

‘ cylindrical hats, the former, with a long beard and
‘ sheep-skin robe, sat upon the box, the latter, in a
‘ coarse, drugget garb, rode upon the off-horse, and
‘ behind the carriage, was an enormous sack of hay.
‘ This is the customary vehicle of the city. They
‘ don’t put up their horses here from morning to night,
‘ but about dinner-time, turn them loose into the court-
‘ yards of the houses where the master dines, and leave
‘ them to feed on the hay they carry with them.’

‘ The palace at Moscow, is a vast assemblage of nu-
‘ merous buildidgs, distributed into many streets and
‘ resembling a town, and all the timber used in these
‘ and other buildings, are wholly fashioned with an axe,
‘ carpenters here never using a saw, a chisel, or a
‘ plane. The palace gardens are of considerable ex-
‘ tent, and contain some good gravel walks ; in some
‘ parts, the grounds are laid out in a pleasing and
‘ natural manner, but in general, the old style of gar-
‘ dening prevailed, and continually presented us with
‘ rows of chipped yew-trees, long straight canals, and
‘ a profusion of preposterous statues.’

‘ We soon ceased to be surprized that our carriage
‘ had four horses, nothing being more common than
‘ to meet the nobility with complete sets driving about
‘ the streets. The hackney-coaches are stationed in
‘ the streets as with us, are without tops, have mostly
‘ four wheels, and are provided either with a long

‘ bench, or one, two, or three separate seats, like arm-
‘ ed chairs, placed sideways, and their fares are so
‘ reasonable, that servants often take a coach, when
‘ they have any distance to go. The coachman ge-
‘ nerally drives a full trot, at the rate of eight or nine
‘ miles an hour.

‘ Nothing can exceed the hospitality of the Russians;
‘ we could never pay a morning visit to any nobleman
‘ without being detained to dinner: the principal per-
‘ sons of distinction keep open tables, and have music
‘ during dinner. They have also a great number of
‘ retainers and dependants mixed with their servants,
‘ who stand occasionally round their lord’s chair, and
‘ seem highly pleased, if distinguished by a nod or a
‘ smile. At an entertainment given us by a Russian
‘ nobleman, we were particularly struck with the quan-
‘ tity and quality of the fruit which was brought in,
‘ after dinner, pines, peaches, apricots, grapes, pears,
‘ cherries, none of which can be there obtained but
‘ in hot-houses, and yet served up in the greatest pro-
‘ fusion. There was a delicious species of small me-
‘ lon, sent by land-carriage from Astracan, though at
‘ the distance of 1,000 miles. These melons some-
‘ times cost five pounds each, and at other times are
‘ sold for half-a-crown. One instance of elegance
‘ which distinguished the desert, and which had the
‘ prettiest effect imaginable, must not be omitted. At
‘ the upper and lower end of the table were placed two
‘ china

‘ china vases, containing cherry-trees in full leaf and
‘ fruit hanging on the boughs, which was gathered by
‘ the company ; we observed, also a curious species of
‘ apple, not uncommon here, it is something larger
‘ than a golden pippin, has the colour and transparency
‘ of pale amber, and has an exquisite flavour. The tree
‘ thrives here in the open air, without any particular
‘ attention to it’s culture, but degenerates in other
‘ countries. The Russian nobles display a great de-
‘ gree of grandeur and magnificence in their houses,
‘ domestics, and way of living. Their palaces, at and
‘ near Moscow, are stupendous piles of buildings, and
‘ in the country they live like independent princes ; as
‘ the feudal barons in early times, they have their sepa-
‘ rate courts of justice, and govern their vassals with an
‘ almost unlimited sway.’

‘ At the furthest extremity of the suburbs, in a se-
‘ questered spot, is a kind of Vauxhall, the proprietor
‘ of which is an Englishman, by name *Mattocks*, to
‘ whom the Empress has given an exclusive patent for
‘ all plays and public masquerades for ten years.
‘ Here is a fine rotunda, the place was well illumina-
‘ ted, and the entrance money four shillings.’

‘ The places of divine worship at Moscow are ex-
‘ ceedingly numerous ; including chapels, there are
‘ above 1,000. There are 484 public churches, 199
‘ of these are built with brick, the rest are of wood.

‘ The former are stuccoed or white-washed, the latter
‘ are painted red.’

‘ There are two convents in this city, one a nunne-
‘ ry, and the other a monastery for men. In the prin-
‘ cipal chapel of the nunnery, lie buried several Cza-
‘ rinas and princeffes of the imperial family, in stone
‘ coffins, ranged on the floor in rows ; each coffin is
‘ covered with a crimson or black velvet pall, edged
‘ with gold or silver lace, and embroidered on the
‘ middle with a cross, over which, on festival days, are
‘ laid other coverings of gold or silver tiffue, richly
‘ studded with pearl or precious stones. Having seen
‘ the chapel, &c. as we entered the antichamber, the
‘ abbess struck the floor with a cane, when instant-
‘ neously a chorus of about twenty nuns received us
‘ with hymns, and continued singing as long as we
‘ staid.’

‘ The churches of Moscow are divided into three
‘ parts, the vestibule, the body, and the sanctuary,
‘ resembling our chancel. In the body are generally
‘ four pillars supporting the dome, and these pillars are
‘ decorated with paintings of the Virgin Mary and
‘ Saints. The most magnificent church in Moscow,
‘ has an enormous chandelier of massive silver hanging
‘ in the centre of the dome, and weighing 2,940
‘ pounds, it was made in England, and a present from
‘ the prime-minister of Russia. The skreen that di-
‘ vides

‘vides the sanctuary from the body of the church is in
‘many parts covered with plates of solid silver and
‘gold, richly worked. Among the many paintings
‘which cover the inner-walls, is the head of the Vir-
‘gin, supposed to have been painted by St. Luke,
‘and greatly celebrated in this country, for it’s power
‘of working miracles. It’s face is almost black, it’s
‘head ornamented with a glory of precious stones, and
‘it’s hands and body are gilt.’

‘Moscow is the centre of the inland commerce
‘of Russia, and connects the trade between Eu-
‘rope and Siberia. The only navigation to this
‘city is formed by the Moscow river, communi-
‘cating by the Wolga or Volga, but as the Mos-
‘cow is only navigable in spring, on the melting
‘of the snows, the principal merchandize is conveyed
‘to and from this place in winter, upon sledges. The
‘whole retail commerce is carried on in the Khitaigo-
‘rod or centre of the city, where, according to Rus-
‘sian custom, all the shops, without houses, are collect-
‘ed in one spot. The place is like a fair or market,
‘consisting of many rows of brick buildings, with
‘alleys between them. The tradesman comes to his
‘shop in the morning, remains there all day, and re-
‘turns home to his family in the afternoon. Every
‘trade has it’s separate department, and they who sell
‘the same goods have booths adjoining to each other.
‘Furs and skins form the most considerable article of
‘commerce

‘ commerce in Moscow, and the shops which vend
‘ them occupy several streets.’

‘ Among the curiosities of Moscow, I must not
‘ omit the market for the sale of houses. It is held
‘ in a large open space in one of the suburbs, and ex-
‘ hibits a great variety of *ready-made* houses, thickly
‘ scattered upon the ground. The man who wants a
‘ dwelling repairs to this spot, mentions the number
‘ of rooms he requires, examines the different timbers,
‘ which are regularly numbered, and bargains for that
‘ which suits him best. The house is sometimes paid
‘ for on the spot, and taken away by the purchaser,
‘ or sometimes the seller contracts to remove it and
‘ erect it where it is to stand; and, a dwelling may
‘ be purchased, removed, raised and inhabited, in the
‘ space of a week. These *ready-made* houses are ge-
‘ nerally collections of trunks of trees, tenanted and
‘ mortised at each end, into one another, and nothing
‘ more is required, than the labour of transporting and
‘ erecting them. Wooden structures of very large
‘ dimensions and handsome appearance, are occasio-
‘ nally formed in Russia, with an expedition almost
‘ inconceivable to the inhabitants of other countries :
‘ a remarkable instance of this dispatch was displayed
‘ the last time the Empress came to Moscow. Her
‘ Majesty proposed to reside in the mansion of Prince
‘ Galatzin, which is esteemed the completest edifice in
‘ the city, but as it was not sufficiently spacious for
her

‘ her reception, a temporary addition of wood, larger
‘ than the whole house, and containing a magnificent
‘ suite of apartments, was begun and finished within
‘ the space of six weeks. This meteor-like fabrick was
‘ so handsome and commodious, that the materials,
‘ which were taken down at her Majesty’s departure,
‘ were ordered to be re-constructed as a kind of impe-
‘ rial villa, upon an eminence near the city.’

‘ At the entrance of each street in Moscow, is a
‘ *chevaux-de-frize* gate, one end of which turns upon
‘ a pivot, and the other rolls upon a wheel; near it is
‘ a centry-box, in which a man is occasionally statio-
‘ ned; and, in times of riot or a fire, the centinel
‘ shuts the gate, all passage is immediately stopped,
‘ and any mob or concourse of people prevented.’

‘ Among the public institutions of this city, the
‘ most remarkable is, the Foundling Hospital, endow-
‘ ed in 1764, by the present Empress, and supported
‘ by voluntary contributions. It is an immense pile
‘ of building, of a quadrangular form, and capable of
‘ receiving 8,000 children. Every child, that is
‘ brought, is admitted, the rooms are large and lofty,
‘ each infant has a separate bed, the bedsteads are
‘ iron, the sheets are changed weekly, and the linen
‘ three times a week. No cradles are allowed, no
‘ swaddling, but the children are all loosely dressed.
‘ The director of this hospital is so beloved and ca-
‘ ressed

‘ reffed by the children, that, whenever he enters a
‘ room, they croud round him, and are as emulous of
‘ fhewing their fondnefs, as if he was their parent.
‘ They are divided into claffes, according to their ages;
‘ after remaining two years in the nurfery, they are
‘ admitted, boys and girls together, into the loweft clafs,
‘ where they continue five years. The boys are taught
‘ to knit, card hemp, flax and wool, and work in dif-
‘ ferent manufactures. The girls learn to knit, net,
‘ and do all kinds of needle-work, fpin and weave lace,
‘ and are employed in cookery, baking, and house-
‘ work of all forts. Both boys and girls learn to read,
‘ write, and caft accounts.’

‘ At fourteen, they may chufe any branch of trade
‘ they like beft, and for this purpofe, there are differ-
‘ ent fpecies of manufactures eftablifhed in the hofpi-
‘ tal, of which the chief is embroidery, filk ftockings,
‘ ribbonds, lace, gloves, buttons, and cabinet-work.
‘ A feparate room is appropriated to each trade. Some
‘ boys are inftructed in French and German, and a few
‘ in the Latin tongue. Others learn mufic, drawing
‘ and dancing. About the age of twenty, the found-
‘ lings receive a fum of money, with feveral other ad-
‘ vantages, which enables them to follow their trade
‘ in any part of the empire, a very confiderable pri-
‘ vilege in Ruffia, where the peafants are flaves and
‘ cannot leave their village, without the permission of
‘ their mafter.’

‘ In

‘ In the hospital there is a theatre, of which all the
‘ decorations are the work of the foundlings; they
‘ constructed the stage, painted the scenes, and made
‘ the dresses, and they perform plays in the Russian
‘ language. I was surprised, says Mr. Cox, at the ease
‘ with which they trod the stage, and was pleased with
‘ the gracefulness of their action. There were some
‘ agreeable voices in the opera. The orchestra was
‘ filled with a band by no means contemptible, which
‘ consisted entirely of foundlings, except the first vio-
‘ lin, who was their music-master. They perform also
‘ ballets, and dance with great taste and elegance.
‘ The Empress countenances this feminary of theatri-
‘ cal representation, from a desire of diffusing among
‘ her subjects that species of entertainment, which she
‘ considers as a means of civilization, and of enriching
‘ the Russian theatres with a constant supply of per-
‘ formers.’

Kapawna. From Moscow I pursued my way to Wolodimir, through Kapawna, a village about 23 English miles from Moscow. This is a place much celebrated for it's manufactures, and here are several gunpowder mills, belonging to private persons. The country is covered with pine-trees, and the soil is every where full of flints, bearing evident traces of petrifications.

Wolodimir

Wolodimir is a city situated on some highlands along the northern banks of the river Kljaschma, and though not very populous or well-built, yet on account of it's delightful and advantageous situation, it's having 24 parishes, being partly built with free-stone, and partly with wood, and the houses encompassed with gardens, it makes a good appearance and affords a noble view. Near this city are still to be seen the ruins of the ancient town, which extended itself near seven miles from the present boundaries. Whilst we were here it was fruit-season, and we had no rest day or night, owing to those who watch the cherry-orchards. In the middle of each, they erect a scaffold, from which they strain lines to every corner of the orchard. On each of these lines is fastened a rattling hammer, which if the line is in the least moved, gives a strong alarm. During the ripening of the fruit, men are appointed to watch these orchards, who frighten the birds by striking these rattles, and keep off interlopers, by flinging at them. They have in general but two kinds of cherry, except in the bishop's garden, where are grafted some others and which seem to thrive. A large quantity of this fruit, vegetables, and cucumbers for pickling, are conveyed to Moscow, about 84 miles distant. In the country round Wolodimir, are many noble mansions, the seats of the nobility, though the lands consist in general of dry, sandy heaths. In this neighbourhood are some hills of lime-stone, which they dig and carry to Twer and Moscow to be burnt. The
countryman

countryman fancies, that if he covers his cart-load of burnt lime but thinly with asp-leaves, that the hardest and most violent rain cannot injure it.

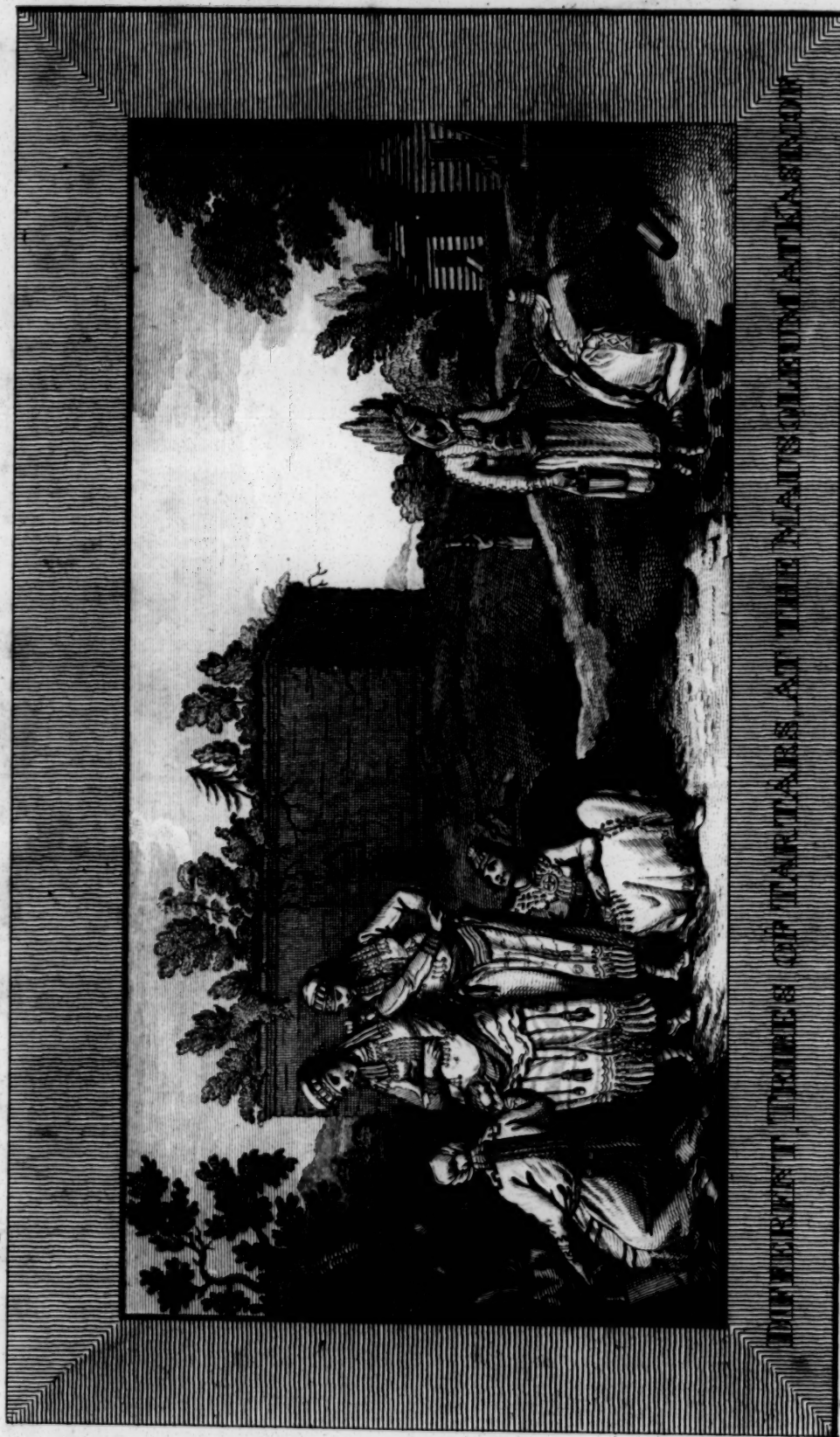
July 28, Mugina. From Wolodimir, on July 28, we made the best of our way to Kasimof; through Mugina, Wjosciski, and Constantinowo. Beyond Mugina the country is woody, with a marshy soil, so woody, that there is scarce any open land to be seen, and the villagers are obliged to clear it away near their habitations, in order to procure ground for necessary tillage, which they do, by firing these woods, regardless of the consequence, whether it burns to the distance of half a mile square, or ten miles. So that we see standing a number of burnt trunks of trees, which they are too indolent to grub up. There are however many noblemen's seats in this vicinage, but they bear the appearance of a lazy and forest economy. The timber in these forests is chiefly fir and birch, some pines, and underwood of various kinds. The highways, on account of their marshiness are, all along, laid with the bodies of young firs, which make the roads very rough, and disagreeable. Not far from Wjosciski are two glass-houses, which are at no loss for fire.

Constantinowo. The inhabitants of Constantinowo are mostly potters, and carry their wares to all the adjacent towns; for the land, round the villages in this neighbourhood, is chiefly potter's earth.

Kasimof,

Kasimof, about 130 miles from Moscow. Kasimof is a mean-built town, and the lands annexed to it belong to the regency of Woronesh. Notwithstanding an excellent free-stone is found here, fit for building, the inhabitants make no use of it, for the whole town is built, in the Russian mode, with timber; and what is most ridiculous, they lay their streets and highways with boards and timber also, and the few churches and large buildings which are erected with stone, are built with such mortar as came first to hand.

In former times, when Kasimof belonged to Tartarian princes, they were not so inattentive to the nature of their stone, for we still see some handsome remains of their buildings worth preserving for the admiration of posterity. In this Tartarian colony, (for the descendants of the ancient, Tartar inhabitants are still resident in this town and it's neighbourhood, who are, for the most part, affluent fur-merchants,) we see on an elevated spot, a high strong round-built tower or Misgir, of a ruined temple, which they are now rebuilding by the Empress's order. This ancient place of worship is composed of bricks, 13 inches long, and it's tower of smooth-hewn free-stone, seemingly taken out of a quarry at eight miles distance. The other Tartarian remains are situated in an enclosure and some gardens just by the tower, and are composed of the same kind of free-stone. This place seems formerly to have been the residence of the Khan or Tartarian



Barney del

Barlow sculp

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tarian prince, and there stood till lately some great buildings and a triumphal arch, with Gothic ornaments and Arabian inscriptions, also an oblong, square-built mansion, and a mausoleum not far from the common burial ground. This triumphal arch was for some unknown reasons demolished by the present proprietor, and converted into a lime-kiln, so that I could see only it's rubbish, and some few of it's ornaments. The prince's palace has also been pulled down, and nothing remains of it, but it's base or foundation, five feet in height, which is converted into a wooden dwelling-house. This mansion or palace was from North to South, about 75 English feet in length, and about 22 feet wide. Under this building is a cave strong vaulted, running under the whole.

South-east of this mansion stands the mausoleum of the Khans, which the proprietor, though in his garden, has spared from destruction. It has not the least gothic appearance, but is a strong, oblong, square-sided building, composed of smooth-hewn free-stone. It has, round it's top, a plain cornice. The plate represents a south view of it. The western end contains a small vault or closet, designed as I apprehend, for private prayer, according to the Mahommedan custom. On the west side is a small entrance, paved with rough unhewn stones, and on the north side a small window to let in the air. The other part of the mausoleum has a vault, in which are tomb-stones. These

vaults are covered with earth within the walls, on which grow some elder-trees. The length of the whole building from east to west is above 47 English feet, the breadth from north to south about 26 feet, and it's height about 16 feet.

The little vault on the inside is not much above thirteen feet broad, from east to west. The entrance to the great vault is on the southern side, almost in the middle of the building, close to the partition between the two vaults. It is a small door, not quite three feet and a half wide on the outside, increasing to near four feet and a half within, but without any appearance of hinges. On this door is a table or slab of marble, with the following inscription in Arabic.

TO THE SOLE GREAT GOD!

THE PRINCE OF THIS PLACE,

SCHAGALI-KAN,

SON OF SULTAN SCHICH AULEAR.

The 21st day of the Month *Ramazan*, in the Year 961.

Viz. Of the Hegyra, this is, if I mistake not, according to our calculation, in the year 1520. The great vault is about twenty-one feet wide, about seventeen broad, and twelve feet high. The northern wall has two windows or openings, and the eastern wall but
one,

one, which are like the door, narrower towards the outside, and were formerly crossed with iron-bars, which some one has thought proper to remove. On the ground, within the walls, are eight distinguishable grave-hills, about seven feet long, covered with stones. One of these is almost square, whereby it appears, that two bodies have been there interred. Indeed within the vaults over which these *tumuli* or hillocks are raised, there are nine skulls to be seen. At the head or west end of each grave-hill was erected a tomb-stone five or six feet high, the top of these stones shaped off in an obtuse angle. There is now but two of these stones standing, the others are broken to pieces and scattered about. These stones on one side were ornamented with flowers and stars, on the other was an Arabian inscription, neatly finished and divided into spaces. Underneath these vaults is a subterranean sepulchral cave, of the same length with the vaults, but not so wide, the entrance into which is a narrow opening, formerly stuffed up with earth and stones. In this low sepulchral cave dead bodies have been laid on a wooden scaffold, but modern curiosity having troubled their rest, nothing now is there to be seen, but scattered skulls, rib-bones, hair, and some yellow, green, and brown striped taffaty, which has preserved it's texture and colour, tolerably well.

In the neighbourhood of this town they gather the Birthwort, a plant renowned as a family-medicine

among the Russian peasants. It is reported, that this plant boiled is an infallible cure for all pains in the limbs, and that it's fruit, which resembles a fig, if eaten raw, cures all relapses of fevers.

August 3. I left this place for Murom the 3d of August, and travelled all along the banks of the Oka, where are a number of luxuriant meadows. The Russian countrywomen here, wear a particular head-dress which I saw not in any other place. This is a flat, stiff cap, the top of which forms a pair of horns, and round which, according to their fashion, they wind a piece of cloth which hangs down behind.

August 4, 5. On the 4th and 5th we passed many lordships, for the nearer we approached Murom, the more villages we saw on both sides. Just before we enter Murom, is a chapel, built with wood, and dedicated to *St. Elias*, near which is a small house of prayer, and an enclosed well, which this holy man is said to have dug himself, and which the superstitious people believe is of great benefit to the head and eyes, if they wash themselves with it's water devoutly.

Murom, about 54 miles from Kasimof. Murom, like the town of Kasimof, is built close to the river Oka, and suffers much by the rapidity of it's waters, which wash away the bank on which the town stands, and occasions many of the buildings to fall in. The old inhabitants

inhabitants remember that the houses stood formerly as far out as the middle of the river, and that a church, among other buildings was once carried away by the stream. It even now undermines some house or other annually; and, some at present stand so near upon the brink of the shore, that it is rashness to inhabit them. Here are also some public buildings, two churches, and a convent, which seem hourly to wait their fall, and would have been in the water, e're now, had they not been supported with large stones placed beneath them. Were willow-trees planted against the bank, the earth would stand firm against the waters, and these disasters might be prevented.

The inhabitants of this town are more industrious in the cultivation of their gardens, than the people generally are in little Russian towns; for, they not only raise culinary herbs of most kinds, but also melons and fruits. Some houses have good apple-orchards annexed.

It may not be disagreeable to some readers to know, that in this vicinage grows the Spurge, called by Linnæus, *Euphorbia palustris*, which the people use as an emetic, and if the leaves want efficacy, they take an extract of it's root, made with hot-water. This excites but little vomiting, and that at one cast, nor does it gripe. They assured me it was a good remedy

in obstinate relapses of fevers and internal durities. The dose, five Russian *Solotniks* in weight.

The river Oka running here through limy, loamy and sandy shores, will not be supposed to carry any precious metals; but, the fact is, that there are people in Murom, that employ themselves during the summer, in washing the sand near the town, and are richly repaid in what they find. This is small grains of gold; silver and copper, and some pretty small stones. I have often seen them at work; they dig the sand with a spade, and wash it in troughs. Such grains as they find, they put into a quill, stop it up and hang it round their necks. In these washings I have met with small topazes, cornelians, and agates. These certainly must have been washed down the river from the demolition of old tombs, or other accidental circumstances. Perhaps those grains of gold and silver which they find, have the same origin.

Motmofs. Not far from this river, at a village called Motmofs, about twenty-two miles from Murom, we met for the first time in Russia, people afflicted with wens, and though the village is small, there are many, particularly children and young folks, labouring in the highest degree under this disorder. They say this evil is not less common in other neighbouring villages, and as the brook-waters used here, are of a martial or chalybeate nature, and carry many marly particles,
the

the hitherto-unknown origin of this malady might perhaps be found out, if those waters, where the disorder is common, could be discovered of a similar quality.

Here is a great deal of iron-stone dug in this neighbourhood, one hundred weight of which will yield 30lb. of neat iron. The method of preparing it for the melting-house is, to burn it first, which they do on stacks of pine-trunks. There are iron-mills not far off, where they cast and forge iron.

August 15. On the 15th of August, we left Murom, in our way to Arfamas, and in a village about twenty-four miles from it, I took notice of the use the country people made of the Siberian Centaury. Having picked only the broadest leaves, they dry them, beat them to powder in a fine woolen clout, and use that powder as a stiptic to stop the bleeding of wounds. It soon closes the wound and heals it.

Forest of Muran. In the forest of Muran, great plenty of mushrooms are found, which the country-folks gather for food, and lay up for the winter. These, with bread, is the chief support of the poor. Such as they lay up for the winter, they salt and dry. Every kind of mushroom is here eaten, except the fly mushroom, and that which grows in dung. They either eat them raw with salt, boil them in oil, or roast them;

but, the most remarkable mushroom, is that which they call *Osinowik*, which implies, growing in ash-wood. As soon as it is gathered and laid in the air, or as soon as it's stem begins to ripen, the part underneath the head takes on a greasy and blue colour; if broken in the middle, it's body seems quite white, but after a few seconds turns bluish in the air, and in the end changes into a most beautiful ultramarine. Break it as often as you will, the broken parts will have the same appearance, and if it's watery juice is pressed out, it's drops, in falling, have a bluish cast, but momentarily change, in an open vessel, into the above-mentioned beautiful color, which will dye linen the same. It is a pity however, that at the moment of it's highest perfection, it should grow gradually pale. Linen dyed with it, and even the juice will go through every shade into a colour, called Saxon green, and in the space of twenty-four hours, will change into a bluish green; which grows paler still, and cannot be preserved by any of the usual means. If dipped in water, it grows pale sooner, and almost loses it's whole colour when dying.

Aug. 19. Arsamias, about 90 miles from Murom. On the 19th, we reached Arsamias, about ninety miles from Murom. This town stands on an eminence, has some trade, and it's inhabitants live more by commerce than by husbandry, except in the article of onions, of which they transport a great quantity into the eastern parts of the empire.

However

However filthy and ill-built the town of Arfamas is, on account of the various trades and business carried on in it, it is more than ordinary plentiful, populous and wealthy, which shews how far a little trade and a few manufactures will enrich a state. The whole town, a few public offices and shop-keepers excepted, consists of soap-boilers, tanners, blue-dyers, and shoemakers. The latter work out, and transport a great deal of leather, here prepared.

Little but the common sort of leather is tanned in Arfamas, except indeed a few Russia hides, which are not in the greatest estimation. They tan with the bark of *Salix Arenaria*, a species of willow, and render the skins smooth, with the purest and thinnest birch-oil, which they convey here by the river Kama. They have no mills to grind their tan, but reduce it to powder by beating it with heavy sharp-edged hammers, as they generally do throughout all Russia.

The soap here made is white, and but of one sort. They make their lye of common wood-ashes only. The soap is boiled in iron furnaces so large, as to contain from four tons weight English of grease to seven tons, and they put ten pounds of salt to 100 lbs. of grease. The grease is then boiled often upon the lye, which they frequently change, for ten or twelve days, till the surface shews that the soap is completed. The furnace then is suffered to cool for twelve days more,
and

and the soap is dug out with iron spades. Of a quantity of greafe, they generally draw four-fifths of it in soap. Of the scum-soap, they make a fud, and if the greafe be good, it yields pound for pound.

The dyers in this town dye only that blue linen so fashionable among the Russian women, except a little narrow cotton, which is here made. Their method of dying is merely boiling the linen in water, in which they put very little indigo and woad, with some wood-ashes, smoothing the cloth afterwards by pressing it, then watering it, and stretching it abroad till it is dry. Before they dye the linen, they beat it, that it may not take too much colour. Some women dye their cloths red themselves, with a wild red they gather in the fields and also green, in a dye formed from birch-twigs and allum. The yellow chamomile, (*Anthemis tinctoria*,) yields an excellent yellow colour, either for dying or painting.

As the streets of this town are narrow and very muddy, and all these nasty trades are there carried on, the reader may naturally judge of the impurity of it's air. And though the inhabitants have no wells, nor any water to drink but what they take from a small brook that runs through the town, they throw into this brook without hesitation all the filth they make.

Besides

Besides these manufactures, they were establishing one for pot-ashes, upon a new plan.

In all the low lands about Arsamias, grows the Hel-lebore (*Veratrum Album*,) well known to the peasants throughout Russia, on account of it's noxious quality, for which reason they pick it out from the grass when cut. But as this is the time of it's seeds ripening, the plant should be rooted out, or the seeds burnt, to prevent the evil increasing. Young and unexperienced lambs will frequently eat it in spring, and occasion their death ; and, some hungry horses, if it be left in the hay, will also eat it ; when it occasions griping and foaming at the mouth. Should it chance to fall into a yard where poultry is kept, it is sure to kill them. Notwithstanding the plant has this deadly quality, the peasants use it for a salutary purpose. They dry the root, powder it, and spread this powder over those biles, which certain maggots, in this country called *Oestri*, cause in the skin. Nay, they sometimes take the root fresh internally, to expell worms.

Lopatina, about 16 miles from *Arsamias*. Upon an eminence opposite *Lopatina*, about 16 miles from *Arsamias*, are some vestiges of an old intrenchment, which appear to have been thrown up in the early wars carried on in this country, against the Mordvines.

Kawara.

Kawara. In the village Kawara, lying east of Lopatina, is an abyfs to be feen, which fwallowed up a farm and it's inhabitants, owing to fome fubterraneous waters, which in their courfe undermined the ground. There was lately alfo a fimilar finking of the earth, which is now the channel of a flowing water. And there are probably here fome fubterranean waters, as it is well known of a lake in this neighbourhood crowded with fifh, than when they are aware of the net, they retire to an abyfs, the depth of which has not yet been fathomed.

Thefe Mordvines inhabit the right fhore of Pjana, dwell in fome fcattered and fequeftered cottages, and have preferved but few of their ancient customs, owing to their being, for the moft part, converted to chriftianity. They fpeak however a language of their own, and have fome peculiarities of drefs, among the women. In other refpects, they are like the Ruffians.

‘ The Mordvines are of Finnish origin, were of
‘ two tribes,” fays Mr. *Tooke*, ‘ and were a long time
‘ in fubjection to the Tartars, but even then had their
‘ peculiar Khans. They compofe a very confiderable
‘ nation, and at every numeration of them, they have
‘ been found to increafe in the fame proportion as the
‘ Ruffian peafants. Formerly, they had a nobility
‘ among them, but thofe families have been a long
‘ while extinct. Before the introduction of chriftianity,

‘ nity, a Mordvine was not permitted to marry out of
‘ his own tribe, but at present this is not regarded,
‘ and they settle in this or that tribe as they please,
‘ preserving always some principal characteristic, se-
‘ veral particularities of dress, and many distinctive
‘ customs.”

‘ These people resemble more the Russian peasants,
‘ than either the Tscheremisses or the Tschouwasches,
(of whom we shall speak by-and-by,) ‘and conform more
‘ to their way of living. The Mordvines have com-
‘ monly brown harsh hair, a thin beard, and lean face;
‘ it is very rare to find a pretty woman among them.
‘ They are honest, laborious and hospitable, but slow,
‘ and imitate the Russians and Tartars in several
‘ things. There are not many unbaptized among
‘ them, but these eat pork without any scruple, whilst
‘ all the heathen Tschouwasches, and all the people of
‘ Asiatic Russia abhor and abstain from it, as the flesh
‘ of the impurest of animals.”

‘ Since their submission to Russia, they pursue a life
‘ of agriculture, and are not fond of towns, but always
‘ form themselves into little villages, and that in and
‘ about forests. Their villages, houses, farms, agri-
‘ culture and their little flocks, their goods, their food,
‘ and their whole economy, differ in nothing from the
‘ Tschouwasches and Tscheremisses. In like manner
‘ the Mordvines have a little enclosure near their
‘ houses,

‘ houses, wherein they plant roots and herbs for the
‘ kitchen. They are not so fond of hunting as their
‘ neighbours. The Mordvine women are employed
‘ in the same works as the Tschheremissian, and have
‘ neither less dexterity nor application; the state of their
‘ families, their riches and their taxes, are also the
‘ same.’

‘ The dress of the men is that of a Russian peasant,
‘ except their shirts, which they pink and embroider
‘ about the neck and openings.’

The dress of the married Mordvine women consists, of a high-stuffed cap, sewed with various coloured thread, with a flap hanging down behind, to which are tied several little chains and jingling toys; linen shifts and petticoats, which they ornament with red and blue dyed needlework, according to their taste and fancy. They wear also a girdle, from which hangs down behind a kind of apron, embroidered with worsted of various colours, and bordered with fringe, tassels, corals and other rattling and jingling stuff. Round about the girdle, besides the above, they wear several other party-coloured fringed pieces. Those who have such ornamented girdles, have their shifts more elegantly stitched, and wear a wide, linen, upper-gown, with short sleeves, half-an-ell wide. These upper-gowns are sometimes died yellow. Their upper-shift, (for they generally wear two,) is fastened round the throat, with
a small

a small pin, and upon their bosom with a large one, from which hangs such heavy collections of corals, copper-buttons, small little chains, medals, coins, little bells, and other jingling things of the like kind, that the Mordvine dress is not less heavy than a horse's harness. Ear-rings belong to the every days dress, but, on particular occasions, they wear bracelets, wound thrice round the wrist, and exactly similar to those worn in India.

The girls' dress has less of these jingles, but in other respects it is the same, except that they wear no cap, but braid their hair into a tail, agreeable to the Russian fashion, to which are tied some knots of fringes and ribbands. The old fashion was to braid the hair in eight or nine small tresses, those behind each ear rather larger than the rest, having in both a square buckle, to which hang medals and other clattering toys. But all the tresses were lengthened underneath with woollen strings, and passed through the girdle. I afterwards took notice, that even the married Mordvine women, near the Wolga, had their hair in a similar way, braided into a large tail with black sheep's wool, so as to reach down to the knees.

Although

Although the Mordvine women, especially those of Erfanian origin *, whose dress I have here described, are almost the filthiest of all nations throughout the whole Russian empire ; yet, the men deserve the praise of being industrious farmers, and surpass their countrymen in this particular. They breed as many bees as they can, " and will have" says *Tooke*, " from 100 " to 200 hives." Those that live about the woods are hardy and expert huntsmen, and turn every thing in their way to advantage.

‘ Some of their customs according to Mr. *Tooke*, are
 ‘ as follow. Their marriages are transacted by nego-
 ‘ tiation, and they bargain for their wives as do the
 ‘ Tschheremisses. The *Kalym* or price of the bride is
 ‘ commonly between eight and ten rubles, each ruble
 ‘ about four shillings sterling ; a proof that this nati-
 ‘ on is not over rich. The time for the celebration of
 ‘ the nuptials being come, the father of the young
 ‘ man goes to fetch the bride, whose father conducts
 ‘ her by the hand, and delivers her to the former.
 ‘ Her mother on this occasion, presents a little bread
 ‘ and salt to the father-in-law of her daughter ; and
 ‘ then the maid takes leave of her parents, which is
 ‘ always accompanied with tears ; her father-in-law
 ‘ leading her away covered with a veil. On her arrival
 ‘ at the bridegroom’s, they all sit down to table ; the

* The difference between this tribe and the Mordvines, will be explained hereafter.

‘ young

‘ young man pulls his cap over his eyes, and places
‘ himself by her side. A cake of three feet in length
‘ is placed on the table, which the father of the bride-
‘ groom takes, and presents the pointed extremity of
‘ it under the bride’s veil, saying, *Open thine eyes to*
‘ *the light; be thou happy in thy children, and never def-*
‘ *titute of bread!* Immediately after this, the bride-
‘ groom sees his beloved for the first time, whom his
‘ father had bought for him, without consulting him.
‘ This done, they begin to eat and divert themselves
‘ by dances, songs and sports, to the sound of a pipe,
‘ but always with the mug in their hands. When the
‘ young couple prepare for bed, the bride makes a
‘ great deal of resistance, insomuch that the assistants,
‘ force her to sit down on a mat, and then taking up
‘ the corners, carry her upon it into the bed-chamber.
‘ Parents very frequently promise their children, while
‘ yet in their infancy, and as a sign of the engagement,
‘ interchange the pointed ends of horns, which serve
‘ them for snuff-boxes. The young woman, however,
‘ is not bound by this compact, but if the lad is in-
‘ clined to marry elsewhere, he is obliged to pay a
‘ certain number of rubles by way of fine. It is law-
‘ ful among them, to have several wives at once, but
‘ they seldom use this privilege.’

‘ A widower always chooses to marry his sister-in-
‘ law when he can. If the parents will not consent to
‘ this, he tries to slide into her hand under the table,
VOL. II. D ‘ a little

‘ a little loaf, without being perceived, pronouncing
‘ at the same time, *My sister-in-law shall be kept for*
‘ *me.* On saying this, he must run out of the house
‘ as fast as he can, for if he is caught, he is immedi-
‘ ately regaled with a shower of blows, as hard and
‘ as thick as they can be laid on him ; but, if he has
‘ address enough to escape them, the fair-one belongs
‘ to him.”

‘ Among the christian Mordvines, the brides like-
‘ wise cover themselves with a veil during the marri-
‘ age ceremony. Great care is taken that they do not
‘ meet a man in their way to church, it being looked
‘ upon as an unhappy omen.”

The dead are interred in their best cloths; the com-
‘ pany eat cakes and drink beer about the grave, and
‘ place a portion of each upon it.”

‘ The greatest part of the Mordvines are now christi-
‘ ans, but those who are Pagans, call their supreme
‘ being by the name of *Pas*, the Mokscanes call him
‘ *Skie*, which signifies the sky. They have a mother
‘ of the gods and a son of god whom they call *Inil-*
‘ *schbi Pas.* Their *Master Pas*, is a subterranean divi-
‘ nity, not very beneficent. The *Nikolai Pas* is the St.
‘ Nicolas of the Russians, whom they hold in great
‘ veneration. The Mordvines attribute to him the
‘ prosperity of the Russian empire, for which reason
‘ they

‘ they light up candles to him in the Russian churches,
‘ and in their houses hold his image in great respect.
‘ They have no image, and their adorations, sacrifices
‘ and festivals in general, are the same with the reli-
‘ gious ceremonies of the Tschheremisses and the
‘ Tschouwasches. Though the Pagan Mordvines have
‘ no knowledge of the religion of the Russians, they
‘ suppose them to have peculiar divinities, and to ob-
‘ tain their favour, they sacrifice game, and make ob-
‘ lations of cakes and liquors every Christmas and Eas-
‘ ter-day. Whenever they hear thunder they exclaim,
‘ *Paschangui Pourguini Pas*, that is, *Have mercy on us*
‘ *O God Pourguini!* But they make no offering of
‘ any kind to this deity. Their prayers are the same
‘ with those of the people we have so often mentioned.
‘ The countenance they put on when they pray,
‘ the manner of lying with their faces on the earth,
‘ and several of their other customs seem borrowed
‘ from the Tartars.

August 28. On the 28th of August, I left the Pjana and pursued my way to Saransk. This district is remarkable for that rich black soil so common to the Sura, Wolga, and other rivers, which flow from the east into the Wolga. In all these parts, the happy husbandman has no occasion to manure his grounds, and commonly fallows his land but every third crop. Here are spots where the soil never fails, but, where, if it diminishes in richness, there is plenty of ground

in the less inhabited parts, plenty of lay land, which if turned up, produces the finest arable imaginable. Was this rich ground to be manured, the corn would be too luxuriant and fall. With all these advantages, it is to be lamented, that they sow neither hemp, flax, or corn, more than they have occasion for their use ; but, only provide for themselves and the next market. The people here are also very reprehensible for heaping up their dung as they do, on hills, the produce of their numerous herds, as such enormous dung-hills beget monstrous swarms of flies, which are very troublesome.

Arath, about 35 miles from Arsamas. In the town of Arath reside many potters. These burn their vessels in a large pot full of holes, resembling a tub, set in the ground, which the Russians use by way of oven, and when the vessel is red-hot, quench it in boiling water in which some flour has been thrown. They are of opinion this gives the pots a greater solidity and hardness.

Tolskoi Maidan, about 11 miles from Arath. As we travelled further on, we passed villages, particularly about Tolskoi, where their cattle were dying with a plague or contagious distemper. It is evident, that the chief cause of this disorder is their moist pasture and the little care that is taken to keep the cattle dry and clean.

Potshinki,

Potshinki, about 20 miles from Tolskoi. At Potshinki are some fine meadows, where there is a breed of horses, for the Imperial life-guards, to which this stud belongs. The stallions are mostly of Danish race, in order to get large horses. The number generally kept is 30, and about 720 mares. Potshinki is a pretty place, a borough town, has a garrison, three churches, and some thousand houses.

Saransk, about 46 miles from Tolskoi, Sept. 1. On the 1st day of September, we arrived at Saransk, and though the farmers were here busy with their harvest, we had a strong frost. Saransk is a small place, in the province of Penza and regency of Casan, and inhabited by husbandmen, a few tradesmen and merchants excepted. In Saransk, as in all other little towns, in the innermost part of the empire, many of the female inhabitants are employed in dying woollen yarn, with the juice of some herbs growing in this country; and, as I wish to communicate any useful intelligence I could meet with; that some of my readers may profit by my enquiries, I was very inquisitive into the nature of this dye. The principal ingredient is a kind of moss, which grows very copiously in all the fenny woods of Russia, and is universally known by the name of *Seleniza*, in Latin, *Lycopodium complanatum*. The country people gather it by handfuls, tie it in bunches, and carry it to market, where it is sold very cheap. This moss is first reduced to powder, and then made

into the consistency of pap, and very sour with flour. The yarn to be dyed, remains one or more nights in this mixture, which gives it a yellowish cast, it is then washed and dried, and is fit to receive any other colour. The common people, who know not the use of allum, have recourse to this preparation, in almost all dyes; but, the Mordvines, the people of Tschuwa, and the Tartars, use either the common yellow pheasant's-eye (*Adonis verna*,) or the common wormwood, with a small quantity of single-seeded broom mixed, the *Genista tinctoria*, but sometimes, they use only the thistle, (*Carduus heterophyllus*,) with it's pretty, yellow-colouring leaves, called by the Erfane race of Mordvines, *Pisbelaoma-tiksched*, (the green herb,) with which they boil the wool that has been dyed blue, with indigo or woad, and give it a beautiful green.

The herbs commonly made use of here for dying, are the following.

For a light yellow, the yellow chamomile, (*Anthemis tinctoria*,) the single-seeded broom, the dyer's thistle, or melilot, (*Serratula*,) weeds growing generally throughout Russia.

For a fine yellow, the water-hemp agrimony, (*Bidens tripartita*.)

For

For a deep red, the roots of lady's bed-straw, (*Galium molugo*,) or the wood-ruffe, (*aperula tinctoria*,) which they call in Rufs, *Marjona*.

To attempt scarlet, they use the common marjoram, (*Origanum*.)

For green, they dye blue wool, with the above-named yellow-dying herbs, or birch leaves. There are also some who possess the art of making a high green, by an addition of allum, the unblown ears of the reed (*Arundo calamogrostis*,) and a yellow green, from the berries of their foul-tree, (in Rufs, *Kruschina*.) The country women know where to gather all these, in their proper seasons.

For blue, they have no other colouring than the wild woad, which grows in little Russia, but they occasionally purchase indigo, or logwood from the merchants, which they use in their own way.

In order to die yellow, with the single-seeded broom, it's powder is mixed with that pap-like preparation I have mentioned; but, the wool receives first a yellowish tinge, by laying a week in that preparation, before the broom is mixed with it. To brighten the colour, after the wool has been soaked and dried, they wash it at different times in lye. The melilot is boiled in water, with the addition of a little allum, and

the yarn, after having undergone the first preparation, is washed in this dye or liquor. They dye silk, and sometimes wool, with the flower of the yellow chamomile, and the African marigold (*tagetes*,) but with these ingredients, the allum is particularly necessary. The water-hemp agrimony, affords a pretty high yellow, if boiled with some allum, and this grows still more flaming, by the addition of the root of lady's bed-straw and wood-ruffe; and, the oftener the article is dipped in this dye, the brighter the colour. This wild red, (for so I call the root of lady's bed-straw and wood-ruffe,) is like most plants used here for dying, bruised in wooden mortars, and ground to powder with hand-mills. This is made into a pap-like consistency with water, and placed in a warm oven for one night. Next day they add more water, and boil it, and to give brightness to the colour, boil some oak or birch-bark with it. Sometimes they add ashes to it. And when the dye is deep enough, and luke-warm, they dip their wool two or three times in it, and once more, when the dye is boiling hot. If the colour pleases them, they next wash the yarn in the river, and dry it. But the colour is commonly brightest, when the dye consists of a mixture of water-hemp agrimony, the melilot, the single-seeded broom, and the thistle *Carduus heterophyllus*, and the best tincture is made by that deep black-red powder, which, when the roots are gently beaten, comes off at first, this being, properly speaking, the genuine dying bark.

The

The use of the marjoram (*Origanum*,) is different, and was thus described to me. The flowers and crowns of this plant were gathered whilst in bloom, dried in an oven, and reduced to powder. In the same manner they powder the young spring-leaves of the apple-tree. An equal quantity of each of these is taken, (though some will take two-fourths of melilot, one of apple-leaves, and one of boiled malt,) and well mixed with leaven, to make it ferment. As soon as it is four, it is squeezed out with the hands, and set for a whole night in a warm oven, where it is frequently stirred. Here it is dried; this done, it is boiled in clean water, and the dye is complete. Some go to work more simply, by taking equal parts of the herbs and apple-leaves, and boil them with allum. But, with this process, the red will not be beautiful. The colour thus prepared, is very bright, and will not fade by washing.

Issa, 27 miles from *Saransk*, Sept. 5. On the 4th of September we quitted *Saransk*, and reached *Issa*, a village belonging to *Count Woronzo*, at the distance of about twenty-seven miles, pretty late in the evening. This place is also remarkable for it's breed of horses, and of course, little grain is here sowed, but oats. Here is also a carpet manufactory, and another in an adjacent manor. The carpets here fabricated, are renowned for their beauty, and deserve encouragement, was it only because the wool, of which they are made, is taken

taken from the backs of the sheep here bred; the works being carried on by children, over whom a skilful country lass presides, and the wool being dyed, from plants growing in the neighbourhood. The only foreign colour they make use of, are the brasil-wood, which dyes crimson, if prepared with lye, the indigo for dying blue, and the log-wood for dying violet; but, these colours are not so lasting, as those from the herbs I have mentioned.

Infara, about 24 miles from Issa. About twenty-four miles from Issa, in the high road to Pensa, we found ourselves at the city of Infara. This is an abject place, built by the people of Streliza, during the late reign of Peter the Great, whose inhabitants, were neither active nor industrious. The town is situated on the banks of the river Infara, which falls into the Issa. At the upper end of the city, the residing *Sawodsbik Nikonof*, has established an iron manufactory, built a good house for himself, and erected a church with stone, which are the best buildings in this place. The public offices and cathedral, are in the wooden fortrefs, and in poor condition, as is another church built with wood. The iron utensils made in this manufactory, are pots, boilers, and a kind of large seething vessels, which is the chief furniture of a Tartar or Kalmuck's house, and which produce a good price. They manufacture annually, about twenty ton-weight of these articles,

articles, which they carry up the Wolga, to the markets in little Russia.

The iron-stone that supplies this manufactory, is about eight miles distance. There is also in this neighbourhood a manufactory for making pot-ash.

Sept. 6. Schadin, 18 miles from Infa. On the 6th of September we left Infa for Pensa, and at night reached the Mordvine village Schadin, a distance of eighteen miles. The inhabitants of this place, are of a different origin from those who are settled near the Pjana, in the regency of Nischegorod. They are careful to distinguish themselves from the latter, and call themselves *Mokschanes*, which expresses in their language, the whole race of Mordvines, and give the others, the name of *Eršanas*. In these districts inhabited by the Mokschanes, are very few villages of the other tribe, but both are occasionally met with in the same villages, and with little difference between them, all along the rivers Wolga, Sok and Tscheremsnam, and other neighbouring districts belonging to the regencies of Casan and Orenburg, where they were sent with other people to form new colonies. The Mokschanes still say, that before they were dispersed, they inhabited the countries about all the rivers near the Mokscha, or Moscow, (to which they gave their name,) as far as the river Oka, and have been governed by their own little princes. These are the same people of Mokscha,

Mokfscha, of whom Stralenberg speaks. They resemble the Erfanes in many respects, particularly in their language, and yet differ in many points of female dress, and the pronounciation of their words, some of which are peculiar to this race.

This difference is easily discoverable, by comparing the female dress of the Erfanes, with the annexed representation of the holiday dress of the Mokfschian women. The latter have in general more elegance and taste; their cap is not stuffed so high, nor do they hang any rattling toys to it, but it is only plainly worked with the needle, and the cap tied behind the neck with a string. Many wear only one band of linen round the head, the ends of which are decorated with open needle-work, and being tied behind, hang down more or less upon their backs. This dress is very much in vogue about the river Wolga. In the dress of the women of Mokfscha, the several lachets or strings, which are fastened to the cap, and hang down on each side of the bosom, are ornamented with an old Russian silver coin, and on the bosom are joined, across at their ends, by little chains and jingling toys. On the breast-pin, is fastened a kind of shield, and which is rendered heavier, by the quantity of coral, and other clattering ornaments hung to it, than that of the Erfanes. About their neck they wear a collar formed of net-work, composed of many variegated glass-beads. From their
girdle,

girdle hangs down before a large needle-worked apron, divided into four parts from top to bottom, each of which is pinned to the other, and ornamented at bottom, with long tassels, glass-beads, and a certain species of snail-shells, chiefly brought from India, the *Cyprea nodosa*. Behind, instead of an apron, hangs down several black woollen tassels, fastened on strings of various lengths. They used to stick shells and medals with pins upon the bosom and neck of their shifts, to encrease the noise. But the most peculiar part of the dress of the women of Moksha, are some large flying tufts of hair, formed by a short stick within the lock, and leaving the hair loose at the end; many of these short tails are made and hang between other parts of the hair, which are braided into little tresses. These tufts are now out of fashion, and only to be seen on old women, who are in fact ashamed to shew them, and often will not wear them, if not induced to it by much flattery and persuasion. Neither do the women of Moksha, when dressed, bind up their feet with linen bands, but with leather latches or thongs.

The people of Moksha, as I observed before, being now all converted to christianity, remember and retain but few of their former customs and opinions. They are said to have differed little from the Ersanes. They have uniformly assured me, that they neither had idols nor subordinate deities, but always offered
up

up their sacrifices to an invisible Supreme Being, whom they did not call *Paas*, as do the Erfanes, but *Schkai*, or heaven itself, and to which they prayed, turning their faces to the east. They had altars at distant places within the wood, in which they sacrificed horses, oxen, and small cattle. At the burial of a deceased person, the parents were to perform a sacrifice, and the mourners were women. They married their children, before they were grown-up, and frequently gave young women to boys, under a notion of encouraging female industry, and making the wife by her labour, maintain her husband. Men were accustomed to give a portion to their daughters in marriage, which was returned them afterwards, in imitation of all other eastern nations. When the marriage ceremony took place, the bride, in the presence of her own parents, and those of her husband, was set upon a mat and carried into the bridegrooms bed-chamber with these words, *Wot tet Wergafs Utscha*, that is, "Here, wolf, take the lamb," during which ceremony, she was to shew no disinclination or shame-facedness. At present, after the rites are performed in the Russian church, and the bride is returned, she is expected to lament her former situation exceedingly, and some indeed do it so sincerely, as to tear their hair, and scratch their faces most inhumanly. She also wears a linen veil of needle-work over her face. The day after the nuptials, the elder of the parents goes in a solemn manner, with a loaf of bread, on which some little ornament,

to

to wear upon the bosom, is fastened, to give the bride as a present, and this is done by setting it thrice upon her head, uttering these words, *Zatei, mesei, pawei*, in what order he pleases, but the word which he pronounces last, the bride is to be called by : and, they give their children an accidental and commonly an adjectival name. This is all I could learn from this simple people. They appeared to me to be industrious farmers, and to breed a great many bees. Some of them are owners of 200 hives, and they are much cleaner in their person, than their Ersanean brethren. Reddish and light coloured hair is less frequent among them, than among the Ersanes, whose hair is mostly brown. Their women, like those of the Ersanes, are in general not pretty, but they are active, diligent, and laborious. Their knowledge of herbs, for the use of physic and dying, is not small. Round the porches of their houses, you will constantly see some herb or other hanging up to dry, with a number of cole-wort leaves, which the Mordvines lay under the dough of their bread, to be baked with it, as they leaven it uncommonly strong, and it is apt to run. On this account, they dry a winter's provision of these leaves, wetting them a little when they use them. Among the medicinal herbs I saw them make use of, were the St. John's-wort, (*Hypericum, perforatum*,) which they bind over the face in paralytic cases; the English marjoram (*Origanum*,) which they dry, reduce to powder, and strew over wounds and excoriations of children.

dren. The *Virgaurea*, whose ashes they strew over inflammations of the skin, called *Erysipelas*. The bog-bean, (*mercurialis*,) and the aconite, (*aconitum*,) which they use as a poultice for external inflammations, and give internally as a remedy for watery swellings; the leaves of the raspberry-bush, (*Rubus Saxatilis*.) The clover, (*Trifolium Spadiceum*,) and the common thyme, with water, in inflammations of the eyes, which they are often afflicted with, owing to their smoaking cottages; the marsh cinque-foil, (*comarum palustre*,) in cases of difficult birth. Betonies, to bathe weak children in; the blue-bottle, (*Centaurea lacea*,) for a bath against the palsy in children; the star-thistle, (*Stellaria dichotoma*,) the yellow holly, against the looseness of belly in children; and, the pheasant's-eye, (*adonis verna*,) in hysterical disorders, and several others.

The Mordvines do not make their butter in ovens as do the Russians, but like the Finlanders and Tartars, by beating. Like the Russians however they put their fresh cheese, and pour butter on it, to keep it soft. They build their houses either in the Russian or Tartarean method, and lay on large, and pallet-beds, according as they live in the vicinage of either of these people. The old Mordvine houses have their doors to the east, as *Strahlenburg* justly noticed, and their ovens stand on the south-west corner; in other respects they are very narrow and inconvenient, and are for the most part, without chimneys.

The

The face of this country, is open, hilly, and sandy, with occasionally thick forests; but the lands round the villages are in pretty good cultivation.

Wjafera. In our way to Pensfa, we passed through Wjafera, about 16 miles short of it. This town has three churches, one of which they have began to build with stone. Among the horses that drew our coach, I took notice of a mare, whose hair was finer than common, and on enquiry, found there was a stallion in this neighbourhood, whose progeny was all like this mare. In winter, these horses are said to become woolly like sheep.

Sept. 9. Pensfa, about 70 miles from Insara. On the 9th of September, at break of day, we reached Pensfa, about seventy miles distant from Insara. This town, notwithstanding it's buildings are but moderate, yields on account of it's situation, standing on a height near the river Sura, and it's churches, a beautiful prospect. Trade seems to be the principal turn of the inhabitants, and the shops are as well stored here, as in any town on this side Moscow. This has been effected by the establishment of a colony, and it being a place where all travellers stop. The river Sura flows close by the town, and receives the little river Pensfa, which runs through one part of it, and supplies the market with great plenty of fish. They have all the

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smaller kind, and the shad and falmon are caught only in the spring.

In the province of Pensä, are several distilleries of spirits from corn, belonging to the nobility, which shew the richness of this district. Some noblemen have here considerable studs. An attempt was made to establish a vitriol manufactory, though I do not know, whether the project has succeeded; but, the enormous quantity of pebbles found in this neighbourhood, which yield vitriol, deserves some attention, as they might be worked for the benefit of the state.

But what is most worthy notice in the district of Pensä, is the cultivation of woad, which was begun about ten years since by one *Tawlejes*, a merchant, who has established woad-manufacturies in the villages of Korschiman and Staroi-matschim. Having been told that the colour here prepared was not good for much in dying, as it lost it's beauty and liveliness in less than a year's time; I was induced to enquire into the reason of it. I went therefore to the nearest, which was upwards of forty miles from Pensä. The weather since the 25th of August had been very agreeable, but on the 9th of September, we had a great deal of thunder, accompanied with stormy and heavy rains. During this weather, I went to Korschiman on the 12th of September, little suspecting the next day to be the first day of winter, and we arrived there late at night.

Sept. 12.

Sept. 12. Korschiman. Korschiman is inhabited by Mordvines, of the Ersane race. As the workmen had not done the least work for the last nine months, owing, perhaps, to the absence of the proprietor, I could only inspect the place and the implements, and enquire into the manner in which they made it; and it appeared to me, that the business was not well managed, there not being one intelligent and expert man among all the persons employed in it, and that its failure was not owing to the materials. As large quantities of indigo and woad are used throughout Russia, and it is a profitable article of Asiatic commerce, it were to be wished, that instead of purchasing it of strangers, they would take some pains to bring these manufactures to perfection. It would be a great acquisition to the wealth of the empire. Though the works were here suspended, I did not understand that the proprietor meant to abandon his design, but to endeavour to carry it on again on better principles.

On our way back, the weather was not only rainy, but, towards night, winter began to salute us with a heavy snow: the ground was covered to the height of some inches, and the young wood, being still covered with leaves, bent under its weight. Young trees, if once bent down with snow, seldom rise again; of course, an early, premature snow may do a great deal of damage. The thermometer stood from the 150th to the 155th deg. on the 14th of Sept. the cold diminished some de-

grees, but at night it froze again, and the frost was so considerable, that the mercury during the 15th, at night, pointed at 162 deg. and this part diminished but little during the whole winter.

Sept. 15. This weather induced me to hasten my distant journey, and I left Pensa on the 15th, which was as soon as I could procure horses.

Seliska, 14 miles from Pensa. Beyond Pensa we travelled through the extensive forest of Sura, which reached to Seliska, near 14 miles, where we were benighted. The Mordvines of this country keep a great many beehives, which they leave exposed abroad and very little sheltered from the rigours of the winter. They keep also a great deal of cattle, but their sheep are not of the better sort, their wool being seemingly interwoven with goat-hair. There being plenty of trees here which yield rosin, most of the country people are employed in making tar. It froze so much this night, that all the rivers were swoln with ice.

About sixteen miles further on, at a place called Julok-Gorodistche, is the remains of an ancient Tartarian fortification. It stood upon a plain, erected in form of an irregular semicircle, of about 350 fathoms, having a strong breast-work and a ditch. In the centre is a round pit, now sunk, probably contrived to hold water for the cattle.

We

We could not reach Simbursky before the 22d, it being almost impossible to travel by night, for the badness of the roads, even with additional horses. The country however abounds with villages, mostly inhabited by the people of Moksha. The face of the country is a great deal of high-land, covered with forests of pine, in which are many Linden-trees, very advantageous to bees. This tree is the most useful of any tree in Russia. It's timber is good for a variety of purposes, as is also it's bark, and it's bast, of which they make mats and ropes. The leaves and tender slips of the Linden, when dried, is also a good winter-provision for sheep in these places, where they keep so many. The people were here surprized by the winter, and a great deal of hemp, and corn that was not cut, was buried and lost beneath the snow. Those fields also, which were sown with winter-seeds, yielded but a dismal prospect for the ensuing year, for they were devoured by a kind of caterpillar, (*Phalæna frumentalis*,) which in the provinces of Casan, have for some years past been a universal land-plague; for they devoured the young plants as they rose, to the very root, as if they had been fed by cattle. However, the wet weather and frost had killed many of them; for, during the day, they hide themselves in the surface of the earth. There is hardly a better expedient to get rid of these unwelcome devourers, than to strew those fields well, where they are seen, as soon as the seed rises, with ashes of buck-wheat or peas-haulm.

About three miles short of the city of Simburfky, is the line of partition, erected from the Sura to the Wolga, in the reign of the *Czar Alexei Michailowitsch*, which is a great bulwark and a deep ditch, more considerable than that which is thrown up from the western part of the Sura. This line is still in good condition, though all the places built near it have lost their wooden fortifications.

Sept. 22. Simburfky, about 170 miles from Sariska. We had just reached Simburfky on the 22d, when a most violent storm arose at night, from the north-west, which lasted till the 24th; we had then a few days fine weather, and I took the opportunity to see the environs of this city. This place stands on very high ground, between the rivers Wolga and Swijaga, and they are so near to each other, as barely to leave room for the city; though the latter runs a course of about 70 miles, before it empties itself into the Wolga. The hill on which Simburfky stands, is a grey clay, mixed with pyrites, and full of petrifications. The hill gradually falls away on the Swijaga side, but on the Wolga the land is washed away, and leaves a very steep bank. In the river and it's banks are found, a variety of petrifications, and some very transparent crystals. And all the country, between these two rivers, is so full of vitriolic and sulphureous substances, that if manufactories of vitriol, brimstone and allum were established

ed near Casan, they might be plentifully supplied with materials.

Sept. 30. We crossed the river Tschheremschan, at the distance of about 70 miles beyond Simbursky, on a floating bridge of rafts, common in Russia, on account of the strong swelling rivers in that country. In this neighbourhood stands a village, called Bilgar, in which name, the memory of the ancient Bulgarian nation, seems to be preserved.

The whole district of Tschheremschan consists of an excellent black soil, with a sufficiency of birch-wood, for firing; of course, it is well inhabited and cultivated. The inhabitants here consist of Tartars and Mordvines, but chiefly of the people of Tshuwa, now converted to christianity. However, I met with some villages, where the inhabitants still adhere to their ancient religion and customs.

As the language of this people resembles much the Tartarian, so does the dress of their women. They wear coarse, linen clothes, worked with the needle, in worsted, in a variety of colours, but mostly blue, red and black, very much like those of the Mordvines. They have also ornaments like theirs, large pins, and breast-shields, girdles and pendant tassels; but the cap which they constantly wear, even in the house, is like that of the Tartarian women, thickly beset with

old, silver coins or tin spangles, with necklaces of coral beads, tied behind with a large, needleworked band, that hangs down the back; to which is fixed, a number of medals, coins, and pieces of tin and fringe, which band is tucked into the girdle; besides these, they wear also two smaller lappets, fringed at bottom, hanging from the head to the middle of the back, one on each side, and joined together by strings of coral beads. This cap is not like that of the Tartarian women, coming down upon the forehead, or sitting close to the head, but widely extended; so, that both ends of that veil, which these women call *Tastar*, and put round their neck, is crossed under the chin, wound round the head under this cap, and passed through a hole in the top of it, where it resembles a tuft; but they have also caps without holes at top; these are worn by girls. When they are full-dressed, the veils they wear are of fine linen, embellished with glass-beads, and pendant corals. The girls' dress is less ornamental, not wearing the above-mentioned veil; nor has their cap any flap or train behind, but is commonly composed of various colours. These braid their hair, into two or three tresses, and conceal it under their upper shift. In winter, both women and girls wear a kind of man's great coat, made of fur, over their dress. The man's dress is not very different from that of the Russian peasant, except, that his shirt, about the neck, is worked with worsted.

The

The features of the people of Tschuwa, betray a strong mixture of Tartarian blood. Their hair is neither light-brown nor reddish, but commonly black, like that of the Tartars. The features of the women are pretty enough, and they are much more cleanly than the Mordvines. I may say the same of their habitations, which, in many respects, resemble those of the Tartars. Their villages are not generally surrounded with pales, but consist of dispersed dwellings and some small huts, on eminences, where they store their provisions. According to the old custom, the door is on the east-side of the building, which is covered with a large roof, under which, they sleep in summer-time. Within the room is a large bench to sleep on, and an oven standing on the right-hand near the door, frequently without a chimney. In imitation of the Tartars, the better kind of people sleep on good feather-beds, but the poor are contented with rush-mats.

‘ The Tschouvasches, or people of Tschuwa,’ says *Tooke*, ‘ make regular meals, placing themselves round a table, for that purpose. Before they eat, they say *Thore bar, Youra!* that is, O God give us bread! and after meals, *Thora Syrlak!* O Lord cast me not away! They cram their guests as much as possible, present pieces of meat to them on spoons, solicit them to eat, till they can eat no longer, and consider this as a mark of politeness. Like the Tartars, they

‘ they sleep on broad benches, but the better kind of
‘ people sleep on feather-beds.’

‘ When a young among them is inclined to marry,
‘ he commissions a friend to bargain with a girl, who
‘ always gets her as cheap as he can. The price ge-
‘ nerally paid on these occasions, is from twenty to
‘ fifty rubles, each ruble about 4s. English; but a
‘ good chapman will get one for eight, ten, and some-
‘ times for five rubles. The rich will go as far as
‘ eighty, and this purchase-money is called *Golon ofki*.
‘ The brides’ portion is paid in cattle, furniture and
‘ clothes, and is in proportion to the money paid for
‘ her.’

‘ After these preliminaries, follows a ceremony,
‘ called *Kostbenas kayas*, that is, the carrying of the
‘ presents. The bridegroom and his parents visit the
‘ betrothed bride, pay the purchase-money, and make
‘ her friends several sorts of presents, as shirts, cloaths,
‘ linen, &c. The girls father on this occasion, makes
‘ an offering to the sun, of a loaf of wheaten bread
‘ and some honey, accompanied with a prayer for a
‘ happy marriage, and prosperity to the young couple;
‘ after this, they sit down, eat and drink, and appoint
‘ the wedding-day.’

‘ The nuptials are thus celebrated. The bride,
‘ covered with a veil, hides herself behind a screen;
‘ from

‘ from which, after some time, she goes and walks
‘ round the eating-room, with an air of solemnity.
‘ Some young girls then bring her beer, bread and
‘ honey, and when she has walked round the room
‘ three times, the bridegroom enters, snatches off her
‘ veil, kisses her, and changes rings with her. From
‘ this time she is called *Schourafnegher*, or betrothed
‘ maiden, and entertains her company with food. She
‘ then returns behind the screen, and the married wo-
‘ men put on her head the matron cap, which is more
‘ adorned than any she wore before.’

‘ In the evening, when the bride and bridegroom
‘ are to undress, the lady pulls off her husband’s boots;
‘ and the next morning, the friends search for the
‘ Mosaic proofs of her virginity, which if not found,
‘ a boy who serves, as a sort of a paranymp, presents
‘ a mug of beer to one of the principal assistants. In
‘ the bottom of this mug is a hole, which the lad stops
‘ with his finger, but takes it away, when the person
‘ has the mug at his mouth, and the beer thus runs
‘ down his beard and bosom. This makes the com-
‘ pany laugh, and the bride blush. After this, no
‘ further notice is taken of her misconduct. The next
‘ day, the bride regales her friends, and they divert
‘ themselves with dancing. Even those who have em-
‘ braced the christian faith, omit not this ceremony.
‘ The wedding is often held at the house of the bride-
‘ groom’s father, and is a sort of club-dinner, each
‘ guest

‘ guest bringing some eatable with him. Before the
 ‘ meal, a loaf is handed about with a hole in it, into
 ‘ which, such of the company as find themselves so
 ‘ inclined, put in a little small money, as a present.’

‘ At the birth of a child, the friends of the parents
 ‘ come to congratulate them, and the first comers name
 ‘ the infant, and give it presents, by slipping small
 ‘ pieces of coin into the mug they drink out of. This
 ‘ ceremony is called *Piatschir ghivas*, or cradling the
 ‘ child.’

‘ Among the Tschouwafches, the husband is master
 ‘ of the house, orders every thing, and his wife impli-
 ‘ citly obeys him; of course, domestic quarrels are
 ‘ seldom heard of.’

‘ At their funerals, as soon as the grave is filled up,
 ‘ they place lighted torches near it, a cake, and a piece
 ‘ of roasted hen, saying to the dead, *Amenscha palder*,
 ‘ or, That is for thee. The persons present devour
 ‘ the rest, and conceive they have eaten with the dead;
 ‘ then, having cast the old cloaths of the deceased up-
 ‘ on his grave, they go and bathe themselves, and re-
 ‘ turn to the house of their departed friend and feast.’

Such of the people of Tschuwa, as are not yet con-
 verted to the christian faith, keep the Friday holy, as
 do the Mahometans, which they call *Aernekon*, but
 don’t

don't pay the least regard to the Sunday. This, and also the abhorrence of swine's flesh, (which some few indeed will now eat,) is a custom they derive from the Tartars, though they adhere to no other part of their religion. In these villages, where they live agreeable to their ancient customs, the *Sotnik* * goes about on Thursday evening, to announce the festivity of the following day. On which, no one presumes to work, every one spends the day in prayer and amusements; after which, each family, but especially the female part of it, who are not admitted to be present at solemn sacrifices, have said their prayers before a certain sanctuary, which they call *Yerig*. This *Yerig*, is nothing but a bundle of fifteen rods of the wild rose-tree, about four feet long, tyed together in the middle with bast, from which hangs a bit of tin. Each house has such a sanctuary, which is kept in a clean closet, built in the best part of the house. No one is to touch it till the fall of the leaf, when they devoutly throw it into some flowing water.

‘ On the Thursday in Passion week, every father of a
 ‘ family, says *Tooke*, places certain eatables in the yard of
 ‘ his house, with a lighted torch near them, to the me-
 ‘ mory of each person who died in his house, and the

* *A kind of governor, presiding over 100 people chosen by the village. An officer common in Russia, but these are under the authority of the Starost or judge.*

‘ dogs

‘ dogs, as proxies for the dead, feast on this provision.
‘ Even those who are converts to christianity conceive,
‘ that the dead cannot rest in their graves without
‘ this ceremony.’

‘ The priests of Tschuwa, are called *Youma*, and
‘ serve in the triple capacity of priests, fortune-tellers
‘ and magicians. They call their supreme being *Thor*,
‘ and give him a wife, whom they call *Thor Amysch*, or
‘ mother of the gods. They have also a subordinate
‘ divinity. *Schäitan*, is the chief of their malevolent
‘ gods, and has his residence in the water, and in their
‘ prayers, they never omit to beseech *Thor*, that he
‘ will vanquish *Schäitan*.’

‘ Their notion of future existence extends to a bliss-
‘ ful and miserable immortality. Good people they
‘ say, are transplanted, after death, to a blessed abode,
‘ called *Tschemberda*, or the land of perfect satisfac-
‘ tion, where they meet their families, and enjoy their
‘ property much more than before. The wicked, they
‘ think, will be condemned to wander, after death, as
‘ skeletons, deprived of flesh, in cold and barren de-
‘ serts, shivering, wretched, and forlorn.’

‘ At seed-time, they have a feast for petitioning the
‘ gods to give them a fruitful harvest, and after har-
‘ vest they have another thanksgiving, at both of
‘ which they sacrifice victims, and make oblations of
‘ cakes

‘ cakes and milk. Their prayers are always the same,
 ‘ and to this effect. *O God have mercy upon me ! O*
 ‘ *God forsake me not ; give me many sons and daughters.*
 ‘ *O God, give me a great quantity of sheaves of corn, and*
 ‘ *fill my barns with provision ! O God, give me bread*
 ‘ *and honey and drink and victuals and health, with tran-*
 ‘ *quility and rest ! O God, fill my yard with horses,*
 ‘ *horned cattle, sheep and goats ! O God, bless my house,*
 ‘ *that I may lodge and entertain and warm the traveller !*
 ‘ *O God, give thy blessing to the mistress of the earth !*
 ‘ For so they call the Empress, and at the end of
 ‘ every period of this prayer, all the assembly say,
 ‘ *Amin !*

In the neighbourhood of their villages, generally upon some common near a river, they have a sacred place, called *Keremet*. This *Keremet* is a square piece of ground, surrounded with a hedge about six feet high, and has three entrances ; one in the middle of the eastern side, another on the north, and the third on the west. The situation of the place is so contrived, that the northern side leads to the spring or river, as through this gate all the water used in the sacrifice is fetched. The people enter by the western gate, and near the eastern is raised a roof or shed, under which the sacrificial flesh is dressed. Before this shed, is a large table fixed, by fastening boards upon stakes, on which the meat, &c. is laid. Near the northern gate,

is

is another large table, whereon they skin and clean the victims.

Large villages have a great Keremet for public sacrifices, and a smaller one for private families, who sometimes have a Keremet within their houses.

The people of Tschuwa, those in the district of the river Alaty, erect in the middle of the Keremet a little, wooden house, whose door is towards the east, in which they eat the sacrifice standing ; for this purpose, they have long tables, covered with cloths. In the centre of this house is erected a high, wooden pole, which passes through the roof, and has on it's top, an iron ring, flat at bottom and sharp at top. But to this pole is no honour paid, nor do they have one in open Keremets.

In the month of September, when their harvest is housed, and they are ready to sow the winter-seed, the public sacrifices take place again. At these times they offer up a horse, an ox, and a sheep. I never was fortunate enough to be present at one of these great festivals, but I have been told, that they lead the victims through the eastern gate, and tie them, one after the other, to three stakes near the place where the flesh is to be dressed, untill they have said their prayers. This act of devotion is performed towards the east, with great bowing of all the men. Their common form
of

of prayer is *Thor sirlaga*, *Thor biter*, *Bojant schin bul*, that is, "God, have mercy ; God, give us food and preserve us." But they invoke subordinate deities, for whom they have particular prayers. The simple folks of Tschuwa, could not give me any idea of their mythology, but the following are some of the names of their inferior deities, which I learned. *Keremet* is the first, after their supreme being. Besides these, they have *Aflyr*, *Kfnir*, *Pulchs*, *Surodon*, *Sir*, *Sjulfuren-Irsene*, *Chilfir*, *Kebe*, and perhaps many more, of which probably it would be tiresome to enumerate the particulars, or their propriety. It is remarkable, that they give many of their gods a wife and a son, and call upon each of them three times ; as for example, *Thor* or *Keremet-ash*, (the father,) *Keremet-amyche*, the mother,) and *Keremet-Uewli*, (the son,) and so on. I heard this from a simple peasant of Tschuwa, who was unable to give me any further account. When prayers are over, the victims are immolated by one of the elders, chosen, by the voice of the people, to this office. They carefully preserve the blood, and proceed as is related, in the Collections of Russian History.

The skins of the horse and ox, are hung upon two high poles, in the northern corner of the Keremet ; but, the sheep's skin is hung over a rail, fixed on stakes, stuck in the ground. After hanging two days, they are sold among them, but the price is to defray the expences of the sacrificial vessels, or else laid out

in honey and flour to be made use of, at future festivals. The care of this, and to keep the sacred place clean, is entrusted to a man of their own choosing, who considers the office as an honourable employment, and is called *Keremet Pchagann*. Such sacrifices are also performed, when there is a prospect of a bad harvest, before the corn is cut.

Private family sacrifices are performed on many occasions, as in cases of sickness, domestic distress, childbirth, and in memory of the deceased. The father of the family, or the eldest of the relations, having said prayers, kills the victim, which is chiefly some small animal, but generally a sheep. Before it is slain, they throw over it a vessel full of cold water, as they do indeed at public sacrifices. If the animal shakes it off, they proceed; if not, the ceremony is postponed to some other time. After they have eaten the flesh, and whatever is eatable of the victim, they burn the bones, and commit the remainder carefully to the bosom of the earth, that no sacrificial relick may be profaned.

The people of Tschuwa, bury their dead full-dressed, but in a shabby coffin, with the head turned towards the west. They are also said to put into the grave, if the deceased is a man, several small tools, a form whereon they work, their shoes made of twisted bast, (*Lapti*,) the instrument with which they are made,

made, a knife, some bast, and a steel to strike fire, as they do in Lapland. The common burial-ground lies at an equal distance from the village, the Keremet and the high-road, is called *Masar*; and the funeral obsequies are performed at three different times, by the relations and friends of the deceased; on the three following days, *viz.* the Wednesday in Passion-week, the Thursday before Whitsuntide, on which day, the Russians have a similar ceremony, and on the 8th day of November. On this latter day, they not only perform a sacrifice on the grave, but erect a wooden pillar at the head of the grave. Having dug a hole for this pillar, before they fix it in the ground, each person present throws a bit of meat and some of the drink prepared for the funeral, into it; they then eat the sacrifice, drink, entertain, and amuse themselves in a variety of ways.

The collections of Russian history mentioned above, give a full account of the marriages of the people of Tschuwa. The marriage portion paid with the bride, is to the amount of from 50 to 100 rubles, (each ruble 4s. 6d. English.) The bride is not suffered to walk on the day of marriage, but is to ride, or be carried. Divorces sometimes take place, and the custom is, for the husband of the woman he leaves, to rent her veil in two pieces, one of which he keeps to himself, and gives the other to his wife.

As they apply themselves much to breeding of bees, they make a great deal of mead; and, they also have strong beer, with hops, for their feasts, but drink no whey, which the Tartars are so fond of. Their dances are like those of the Mordvines, similar to those of the Tartars, and consist of several motions of the arms and body, turning round with short steps, their feet close together, beating and keeping very good time. The musical instruments used on these occasions are a bag-pipe, a kind of little fiddle with three strings, and a dulcimer, in form of a crescent, with about sixteen or eighteen strings.

Their manner of taking an oath deserves also our notice, and is as follows. He who is to swear, is brought to the Keremet, and there, in the manner of eating the Corfned, described in English history, eats a cake of flour boiled in water and butter, imprecating curses on his head, and that what he eats may choke him, if he utters any thing but the truth.* To try a man suspected of having taken a false oath, they give him salt water to drink, and if he coughs, he is declared guilty. I will only mention one thing more, which is, that the people of Tschuwa, who inhabit the heaths and mountainous part of the country, on the left shore of the Wolga, take the by-name of *Werejal*, but call themselves *Chirdijal*.

* Hence the expression, "May this Morfel be my last!"

Betkulowa, about 100 miles from *Simbursky*. The highest mountains of this country, are near the Tartarian village *Betkulowa*, about 100 miles distant from *Simbursky*, and along the banks of the little river *Scheschma*. These mountains consist of a grey and white sand-stone, in which, is, here and there, some copper ore of small alloy. We rode 17 miles across these mountains, and reached on the 3d of October, through an unbeaten way, in a wet and wild forest, the Tartarian village *Kurmuschli*. *Sconce-Kitschuisloi* was a fort formerly belonging to the line of *Sokam*, which almost extended itself to the river *Ik*, but is now, like all other forts in this district, become an open spot. Here is a post-stage on the great road, from *Orenburg* to *Casan*. Here is also a copper manufactory, but, for want of hands to procure a sufficient quantity of ore and coals, is not always worked. The ore is dug in this neighbourhood, and out of 100lb. is produced 2lb. of pure copper.

We had just left this copper-manufactory, when it began to rain violently, which continued the whole day. This was followed by so great a storm, so much snow, and so dark a night, that it was with difficulty we could reach the Tartarian village *Scharepkina*, a distance only of eight miles. It froze hard the next day, and enabled us to get faster on, so that we reached *Buhulminskaja*, about thirty-seven miles the same night.

Bukulminskaja. This town is tolerably well built, has about 500 houses, and two wooden churches, with a public office and court-house, belonging to the regency of Orenburg. On the 5th, we reached Selo-spaskoje, the usual residence of the counsellor of state Rytshkof, a gentleman celebrated for his writings, and respected for his personal merits, where after a most kind reception, and amid the most social and instructive conversation, I imperceptibly delayed my journey, until the 14th.

This village is prettily situated upon an eminence, surrounded with woody heights above. The little rivers that flow between the mountains, abound with trout and a delicate kind of small salmon. (*Salmo lacustris*,) not uncommon in the Uralian rivers, and is called *Kutema*. As these mountain-waters, on account of their rapidity, seldom freeze, their banks are crowded with a kind of water-bird, rarely to be met with in any other country, than Russia and Siberia; it is a sort of starling, (*Sturnus Cinclus*.) What I am going to relate is a fact, and I was an eye-witness of the truth. These birds, called in Russia water-starlings, dip or dive to the bottom of the water, in search of insects and worms, without wetting their plumage. If they are shot on the icy banks of rivers and not killed outright, they will plunge themselves into the water, and don't rise again till they are dead. The bird, however, cannot be said to swim, not having
the

the requisite organs for that purpose ; but, properly speaking, it flies beneath the water, and clings to the ground, till it has got it's prey. The superstitious countryman fancies, that if any part of the body is anointed with the fat of this bird, it will be for ever free from any injury from frost. Some ascribe this virtue also to it's blood. There are also in the woods, where the water does not freeze in winter, a kind of otter, (*Mustela lutreola*,) very little known, except in Russia, called in the Russian fur-trade *Norka*. It likes to feed upon frogs and little crabs ; but, in other respects, does not differ much in his way of living from the common fish-otter.

On the borders of the river Sok, which I reached on the 12th of October, the country is delightfully pleasant, the lands fertile and rich. This is the western part of Russia, where a number of roebucks are, about the close of winter, caught in snares, by the people of Tartary and Tschuwa, who are fond of hunting in snow-shoes, and can easily overtake them, as the deer are hampered in the snow, and cannot well get on. They are a peculiar kind of animal, very different from all the species of European stags, except as to colour and horns, on which there are many warts. They are of the size of the fallow-deer, and what is most remarkable, have no tail, instead of which, the hinder part of their breech is covered with a little skinny wart. Their quarters behind are white, and I

am therefore led to suppose it to be the *Pygargus* of the ancients. The Russians call it simply *Dikaja Kosa*, the wild she-goat, and the Tartars give it the name of Saiga. In these vast uncultivated wastes are also a number of elks and foxes; and some of the latter, are ten of a blackish colour.

This district, as are all the mountainous heaths along the rivers Sok and Kinel, is some of the best sheep pasture in all Russia; for the common Russian sheep are larger here, than usual.

The Tartarian village Usmanowa, or Nadyr-aul, as it has been called from some principal person who died a few years since, and who intended, under a special order and direction from the superior office of mines, in the province of Orenburg, dated at Ufa, in 1756, to gather the Asphaltos found here, in order to draw an oil from it. For this purpose, he had begun to erect a manufactory at the source of the brook Kamuschli, to which was to be added another, upon the river Surgut. But all these preparations were interrupted and subverted, by the unexpected death of this Tartar.

A mile or two south-east of Semenowo, situated not far from the source of the river Sok, is an Asphaltos spring, on the steep declivity of a mountain, overgrown with birch-trees, whose soil is a fat and black earth.

earth. This spring has been cleaned, and forms on the mountain, a reservoir, about three feet wide, and three feet deep, which is not only constantly full of water without any agitation, but flows over and forms a brook. The water in this reservoir never freezes, even in the most rigorous winter; and, though sometimes covered with snow, the bituminous vapours, which may be smelt from far, will soon make an opening through it, though the water possesses no extraordinary degree of warmth. It was morning, when I was there, and the thermometer, when in the water, was 138 deg. when in the air, it stood at 160 degrees. In this well, the surface of the water is covered with a black and very tough asphaltos, which has the colour and consistency of thick tar, and as often as it is taken off, will gather again in a few days. It had been scummed clean about a fortnight back, and yet, I took from the surface, more than six pounds in weight, and a great deal adhered to the sides: it lay on the water half an inch thick. When the asphaltos is removed, a fine and strong oil remains, which might be fired, and would burn as it lies. Even the water itself has some inflammable parts in it, and makes a solution of *litmus* read. The people in the neighbourhood, use this bituminous water to gargle their throats, and drink, in the apthæ and other infectious and ulcerous complaints of the mouth and throat. They gather the asphaltos, and use it as a family-medicine. As a salve, it will cure recent wounds immediately;
by

by the addition of butter, as an ointment, it heals all sorts of tumours and ulcers; but, their internal use of it is most extraordinary. They take a middling spoonful boiled in milk, which renders it thick, drinking it warm in violent cholics, inward strains, and hidden maladies. It makes the patient almost giddy, throws him into a sweat, and is a powerful diuretic, the urine smelling strongly of it. It is said also, that the peasants use it as coomb to grease their cart-wheels; but, the chief use, is a medicinal one. Another property which the asphaltos has, tough as it is, it is of so very penetrating a power, that though I kept it in a cold place, it made it's way through a wooden box, and in a few weeks, eat into a plank some inches thick. It might be used to preserve wood from corruption, to pay the bottoms of ships, and to keep them from the worms.

Along the stream of the Sok, the mountains consist of a milk-white lime-stone.

Nikuschkina, about 40 miles from Semenowo. In the neighbourhood of Nikuschkina, about 40 miles from Semenowo, are some springs, which depose a fulphureous matter. The people of Tschuwa, and the rest of the inhabitants, use these sulphurous waters as a hot-bath against the itch, and other distempers of the skin. It is certain, that the external and internal use of them would be extremely efficacious, in all cutaneous

neous disorders, and taken internally, might cure many chronical ones.

About ten miles from this, is a remarkable sulphur lake, the most considerable in all this district. I rode to it by break of day, and found it situated deep between two high mountains. It is an oblong basin, over-grown with birches, about 140 yards in length and 113 in breadth. It's aspect is frightful and it's stench, which may be compared to the smell of addled eggs and brimstone, is to be smelt at the distance of three miles; of course, it must be very disagreeable to be near it. It has no perceptible motion and never freezes, and though the weather was cold when I was there, I found it 30 deg. warmer than the air. Hence it is, that a visible thick vapour rises from it. The water is so transparent, that one might discern it's depth, for it is not many feet to the bottom, was it not for the black and greasy ground about it; as it is, it looks like a dreadful gulph. At the time when the sulphur-manufacturers were here, attempts were made to discover the origin of the sulphur in this lake, but in vain; so that it must be hidden in the bowels of this chalk mountain,

From the top of this mountain, issues a sulphur spring, which runs down into this lake, and depofes a sediment, resembling a pure white and thick pulp, and looks as it runs, like thin curds,

It

It is the continuation of this stream from the lake, that forms the remarkable river called the White-water river, which emptys itself into the Surgut. This river, as it proceeds from the lake, is about six feet deep, and it's breadth between 14 and 28 feet. In this channel the water has the appearance of thin curds, but in places where it flows slower, than near the lake, the surface has a fine scum, like that seen upon limy waters, and further distant from the lake, it's banks, when I was there, were icy; the ice, however, was not solid, but consisted of a number of flakes upon one-another, like the ice that is found in fresh milk.

All the matter which the water depofes, is but a sulphur mixed with limy particles. The whole stream was formerly banked with planks, for the use of the sulphur manufactory, erected upon the river Sok, that they might collect the sulphur with more ease; but there is now no traces of such bank left. The manufactories are removed to the Wolga, and this White-water river is neglected.

Where the earth has been dug out to bank up the river Surgat, a thick, black layer of salt-petre earth is seen, and a kind of dust, similar to cinders; among which, lie many lime-stones full of holes, burnt out. This appearance leads me to start a conjecture, which I will leave to the judgment of my readers, whether there may not have been, formerly, some vulcanic fires

in these mountains ; perhaps, some bituminous and sulphureous layers which ran through them are burnt out, and has sublimated the sulphureous parts into the cliffs of the opposite lime-mountains, now proportionably washed out by the penetration of springs. But this is all conjecture.

The cattle seem occasionally to have recourse to these springs, as conducive to their health ; but, as they taint the water of the adjoining rivers, no fish will live in them.

Stawropal. It was now the 16th of October, and as the winter approached fast, and the weather grew bad, I thought it best to return to Simburfsky, and continue there till the spring. I went back therefore, by the way of Stawropal, where I arrived on the 17th. The snow was very deep, it having snowed for two or three days. We met here with those Kalmucks which are become christians, and inhabit the greatest part of the province of Stawropal, wandering with their flocks of sheep to those winter-quarters allotted them, where in summer is made or procured, a winter's provision of hay, and where they live in their strange way, equally in winter as in summer, in cots made of felts. They are said to have begun cultivating a great deal of land, but I perswade myself, that cultivation is only to supply their necessary wants ; for it is not natural to suppose, that a nation, accustomed to the freedom and indolence of a shep-

a shepherd-life, would change the sweets of such a state, for the troublesome and painful condition of a toilsome one. In Stawropal, reside their chiefs, who compose their council of war, and many officers; these go by particular names, expressive of their military rank, as *Chorunsha*, *Jessaul*, &c. that is, cornet, adjutant, and so on, and are all well paid; they have here a *Protecep*, or chief-priest, subordinate to whom are many *Peps* or priests, chosen by the villages, and also a physician. Persons of the first rank among them reside in the town; but the Kalmucks, who are fur-merchants and shepherds, live either in town or country as it suits them, or even in their felt-huts; though few endeavour to acquire more the advantages of a polite life than those vagrants, in the step or waste of Wolga. The number of converted Kalmucks is said now to be encreased to 14,000; among which, there are a thousand tents of Sjungors, who professed christianity immediately on the arrival of Sjungordan Ulufs, the missionary from the eastern step. The sheep which they breed, and wherein consist their chief riches, are mostly of the broad-tailed sort; but, they produce no good wool; even the Russian sheep that are mixed with them, degenerate, and have a hairy wool like the Kalmuck; nay, the first lambs got by Kalmuck rams, have their tails either half, or wholly bolstered up with fat. Now, as this nation will hardly ever apply themselves to agriculture, the best way, in my opinion, to make them useful to the state, would be, instead of their
present

present flocks, which are fit for nothing but slaughter, to give them sheep of a better breed, and teach this shepherd-people the method of shearing, especially in those places, where there is the best sheep feed.

The city of Stawropal, is agreeably situated on the high, eastern bank of one of the arms of the Wolga, which they call Kunei-Woloschka. On the land side, it is surrounded with delightful hills, over-grown with pines and birch-trees. On the opposite side of the Wolga, we see at a distance the lofty lime-mountains, called Shigulefski, from the village Shigulich, that lies between them. The middle part of the town represents a fort, consisting of some pallisades, towers, and a battery. It contains two churches, one built with wood, but the mother-church is handsomely erected with stone. Besides the mansions of the Woiwod or governor, there is a court-house or chancery belonging to the regency of Orenburg, the dwellings of the chiefs of the Kalmucks, and other military persons; some provision, and salt magazines, a number of shops, and a school. Above the fort are several streets, wherein live the soldiers of the garrison, and the cossacks, in which place there is a chapel. The number of houses amount to about 450.

October 19. On the 19th of October, I left Stawropal, in order to reach Simbursky, before the rapid ice-flood came on, which the river Wolga seemed to threaten

threaten us with. The first village we passed in our way there, was Santschalewoi, at the distance of about thirteen miles. This place is inhabited by divers sorts of people, comprehended under the general denomination of *Kysilbasbes*, and some of the people of Mokscha. It appears, that since the building of the Mordvine villages, the descendants of the people of Erfania, and those of Mokscha are mixed, and that their language is reduced into one. For example, the Mordvines who inhabit the environs of the Wolga, don't call their supreme being *Paas*, as do the Erfanes, nor *Skai*, like the people of Mokscha, but use the compound word *Skipas*. Besides this, they have adopted a great many of the Tschuwafsch, and are the cleanliest of all the Mordvines. They clean their tables, forms and walls, with a kind of brush, which they call *Ili*, but the Tartars, who use the same instrument, give it the name of *Schlan*. Their women wear nothing but a piece of linen tied round their heads, both ends of which are elegantly stitched, and hang down on the neck behind. I saw some, whose hair, by the addition of black sheep-wool, was braided into a flat tail of two hands in breadth, or in tresses, which reached down to the middle of their legs, and seems to have been the old Erfane ornament. Some, instead of the usual apron worn behind, wear a great many black strings, hanging down from the girdle.

Almost

Almost all the villages on this road, are inhabited by Russians. Near Nikolskoe, south of the river Tscheremschan, are the remains of a strong, Tartarian breast-work ; and, a little behind Nikolskoe, we cross an old Russian line or barrier, which must be older than that of Sakamia, because it is within the latter. This line begins at Beloi-jar, upon the Wolga, and goes to the borough of Eryklinsk, which formerly was fortified, and lies at nine miles distance ; from whence it is said to extend itself over Tynsk and Biljar, to the river Ik, like the Sakamian line. The ditch of this line, is in some places twenty-seven feet wide. Even in the village Nikolskoe, are several heaps of rubbish, probably the remains of some redoubts.

I made the best of my way to Simbursky, (sending my baggage-waggon on before,) as the heavy frost and the badness of the roads would admit, and reached the slobode or suburbs, opposite that city, on the 20th of October, but owing to a north-west wind, and the abundance of ice collected on the shore, I could not cross the river till the next day, when by the help of a boat, and walking on the ice, I was able to do it. The frost here had been so severe, that the Wolga, near a mile broad, was almost frozen over. This river is most commonly shut up with ice in the first week of December, and often much earlier.

This winter I found, was one of the most constant and uninterrupted frosts, the people had ever remembered. The snow fell but little, and a very remarkable northern-light, which was observed on the 24th of November, was the beginning of a violent frost, which raised the mercury in the thermometer, about the middle of December, to 190 degrees. The most common and violent winds which blow always in the winter on the river Wolga, seem to come from the south-west. As these very winds are the most mischievous to the vines and fruits of these parts, was the culture of vines to be extended and even to flourish here, it must be on such spots and hills only, as are sheltered.

About fourteen miles above Simbursky, on the right shore of the Wolga, are the remains of a fortress, supported by a ditch. It is said to have been erected by the celebrated old depredator Jerasim. In this neighbourhood coals are found, of so bituminous a quality, that they will kindle with the flame of a candle. In burning, they have an agreeable smell, similar to gum-anime in it's smoke, and consume to a grey irony ash. These coals are not dug out of the earth, but are a kind of bituminous layer, that floats upon the river Wolga ; though it is probable, if shafts were dug deep enough, the same kind of coal would be found in the earth ; and I am of opinion, it would answer the expence, as the conveyance by the Wolga would

would be trifling, and it might be conveyed to the remotest parts of the empire.

It would have been unpardonable, had I omitted to visit the celebrated remains of the Bulgarian capital Brjachimof, now called Bolgari, lying about eighty miles distant from Simbursky up the Wolga, and upon it's left and low shore; no description having been given of the old, remarkable buildings, still standing there.

December 14. On the 14th of December, I went to this place, the celebrity of which seems to have been encreased, by it's having been honoured with a visit from Peter the Great, and the present Empress: but, not being able to go the nearest way, on account of the ice, with which the Wolga threatened my passage, I was obliged to go over the mountainous parts, which are covered with wood, and abound with small game.

We crossed the river Wolga at Tetjuschi, a little market-town, lying upon the high-road, about seventy-two miles from Simbursky. The river here not being so wide, the ice was crossed in waggons. From this passage to the village Bolgari, which is built upon the ruins of the ancient city, and lies towards the north-east, they reckon fourteen miles. The road leads partly over some low-lands, which the Wolga occasionally overflows, and partly through a high-standing

wood of pines, with which the village is surrounded on all sides.

It's situation is tolerably high, but the land round it is marshy, and bushy. It is wonderful, that so considerable and populous a city as Bolgari seems formerly to have been, should be so badly situated in respect to it's water, which cannot be procured, but by wells. The Wolga runs here in a straight line, for the distance of three miles, and though the village inclines to the river, it does not appear, that it ever had it's course near this city.

The village now consists of above 100 farms, and has been taken possession of by the crown. It lies at the distance of about sixty miles from Casan. In front, towards the south, it has a plain, prettily scattered with resin-trees and birch-trees. It is now chiefly under tillage, and has been the spot on which the city stood. This whole plain is encompassed with a bank and a ditch, which, though decaying, is in some places, twenty-one feet wide. The fortification has the shape of an irregular semioval, four miles in circuit, and adjoins the declivity on which the present village stands. We can plainly see, that a deep and dry ditch crossed this fortress, from south-west to north-east, close by the eastern-side of the village, and seems to be formed by nature. Most of the ancient buildings are within the bank. I will give the reader such a description of the most remarkable

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KIRGIZIANS AT THE RUINS OF BULGARI

Leaving camp.

March 6.

markable ones, as the piercing cold and falling snow, would allow me.

On the eastern side of the village is the scite of a cloister, with some wooden-buildings, and a fine stone-built church. Within the district of this cloister, which is encompassed with a hedge, and goes by the name of Uspenskoi, are many pieces of antiquity. The most remarkable is, a misgir or tower, built with smooth-hewn free-stone, rather more than eighty-four feet high, in pretty good preservation. It has a winding stair-case to the top, consisting of seventy-two steps, each step twelve inches and three-quarters high. These stairs have been repaired, and the tower has been covered with a wooden-roof, and an Arabian inscription within, new written. The entrance is on the south, and has a strong iron-hinge remaining, on which hung the door. In sundry places there are openings, to let in the light ; and, adjoining this misgir, was an irregular, square building strongly erected, part of the walls of which is now standing, and seems to have been formerly a house of prayer ; the tower stands on one corner of it. This wall is built with stones, unequal in size, clumsily joined, and badly hewn ; among which one may discern flints, lime, sand, and several kinds of stucco, all apparently brought from the mountainous part of the Wolga. East of this, stand the remains of a little, Tartarian house of prayer, solidly built with stones of different sizes, with a vaulted roof.

roof. The lower part is square, but the roof is octangular. Each side is thirty-five feet long. It has been repaired, and converted into a Popish chapel, dedicated to one of their saints, called Nikolao, the miraculous. The entrance to this is in the west front, and the windows or opening, to let in the light, on the southern side. On other spots of this enclosure, are the remains of some old building, now converted into a cellar.

There are four other ancient buildings within the ditch, in good preservation, with a great quantity of decayed wall-rubbish, and vestiges of habitations. On the west, are the ruins of a considerable building, called by the peasants, the Greek-house, but for what reason, I know not.

Among the great number of erections is a tower, standing in a field, 350 feet distant south-west from the cloister, built with the same material, as the one I have named, only thicker, and about sixty-three feet in height. Not far from this, towards the cloister, are the foundations of some spacious buildings, among which, the house of prayer, which belonged to the tower, probably stood.

Five hundred and sixty feet further to the south-west, stands yet a little square building, made of strong and solid free-stone, the vaulted-roof of which is
fallen

fallen in on one side, Its entrance is on the west, and it has a small window on the south. In the western front, on each side, is a false window. It has two similar ones, on each of the northern and southern fronts, with this difference, that those on the last two, are farther distant from each other, than those on the western. If supposition may be admitted, this seems to have been nothing but a house of prayer.

The building of which, the principal foundation is now to be seen, standing on the southern side of the village, and the very centre of the city's district, is much more extensive and considerable, and deserves our attention; but, it is scarce to be conjectured, for what purpose it was erected. The country people call it the court-house, and I have no good reason to call it otherwise. The square division of rooms of which the foundations may be seen, appear to have been entrances from without, but not to have had any communication with the apartments in the middle; and, also not to have been higher than the second story. There are three small rooms in the eastern front, two larger ones in the southern, and an oblong one in the western. In its northern corner, is an oblong, square foundation, which touches it only at its angle, and the northern front of the principal building, where the entrance is, shews no signs of side rooms.

As Dr. PALLAS has given us no regular view of the scite of this place, I have not given all the buildings together, but have thrown two of the principal ones into one plate, and have given my readers the third, by itself, an account of which is as follows.

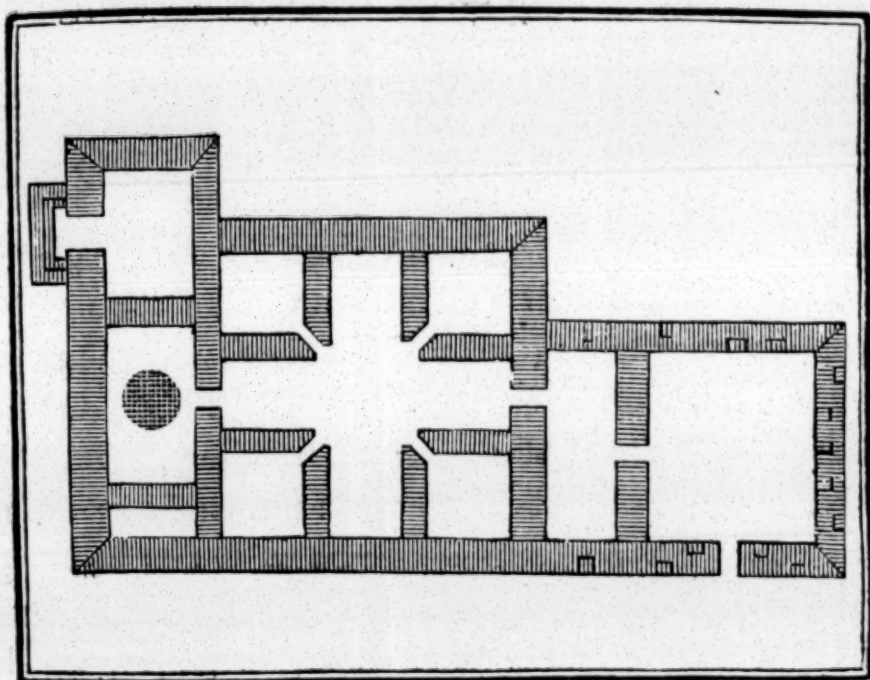
The PROFILE.



At about 700 feet distance on the south, in a straight line from this building, is another ancient and strong-built one, of considerable magnitude. Its architecture is still more remarkable, and the internal division so peculiar, that in order to make it well conceived, I have given the reader the ground-plot. Its northern

or

GROUND-PLOT.



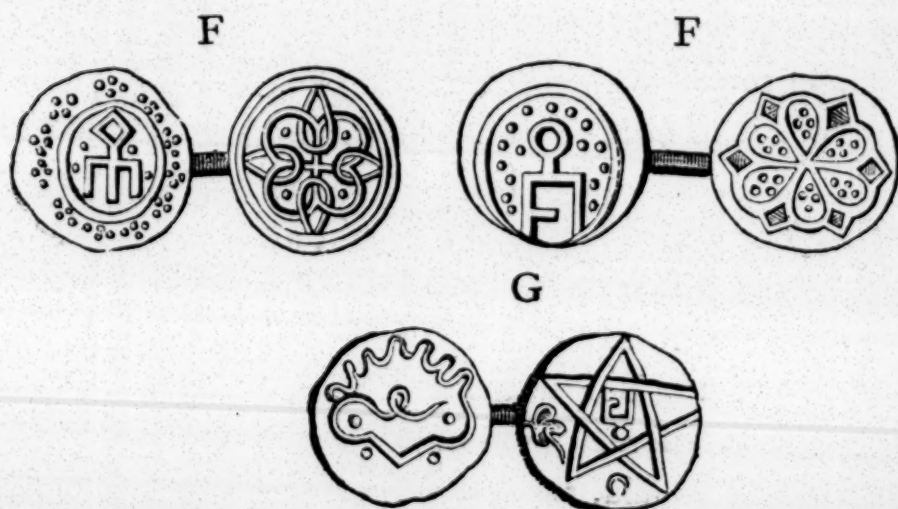
or smaller part, is built on a foundation of lime-stone, with large, Tartarian bricks. It's entrance is on the east, and in the side-walls are several openings, to let in the light. By a cross-wall, it is divided into a square anti-chamber, and an oblong saloon. We pass from the latter into the principal part of the building, which has no second entrance. This part is built, except it's top, which is of brick, with hewn free-stone, in pieces fourteen inches broad, and about 6 inches in thickness. It's greatest space is divided into four closets, by walls from the bottom to the top; between which, is a broad passage, in form of a cross. This cross passage receives it's light from an octagonal sky-light

light in the roof, besides a small window, on each side. About the large pinnacle or swelling roof, are four smaller ones, over each corner closet, which throw the light into these closets only, through an octagonal opening also in the centre. The insides of all these vaulted roofs are concave, and ornamented with stucco. The corner closets are exactly square, and have their doors in the angle, leading into the cross-passage. At the southern end of this building, is an addition of three rooms, the eastern or smallest of which, has no entrance or opening, except a breach into the south-eastern corner closet of the centre building; but, the western, which projects from the center-building about seven feet, has no communication with that building or the middle room, but its entrance is from the outside, like that of the private closet for prayer, which has been described in the burial-place of the Khans, at Kasimof. Under the principal part of this building is a vault, in which there is a subterraneous passage from the southern wall, as into the sepulchral cave at Kasimof; but, this vault being broken in, underneath the southern corner closet, rendered my descent impracticable. From some pieces of decayed wood laying on it, I conceive it to have been a burial-place. If I am not mistaken, these buildings may have been partly used for a school, and partly for a sepulchre, like those ancient ones still to be seen in the city of Taschkent.

Near

Near Bolgari have been found a great many ancient tomb-stones, chiefly with Arabian, but some with Armenian epitaphs, with part of which the foundation of the new church of Usprenski are built, and the remainder lies scattered about, upon the ground. These tomb-stones are of various sizes, their figure like those I described at Kasimof, and some of them are of the same bigness. By order of the Emperor, who shewed his love of arts and sciences upon every occasion, they were not only exactly copied, but a translation was made of all that were legible. Forty-nine have been translated, twenty-two of which are dated in the year of the Hegyra, 623. Of course, it is natural to suppose, there must have been some epidemic sickness in the city that year; the rest are variously dated. The Arabian ones include only a space of 123 years, that is, from the year of the Hegyra 619, to that of 742; during which time, Baty-Khan, previous to his invading the west, is said to have reigned here. There are three in the Armenian language, one dated 557; and two, 984 and 986, which is in the middle of the sixteenth century, comprehending a space of 429 years. These epitaphs contain nothing but a Mahometan sentence, (not found in the Armenian inscriptions,) with the name, birth, and dignity of the deceased. They are chiefly eminent Bulgarians and Tartars of both sexes, some priests, some laymen, and perhaps merchants. Of some, it is said, they were born in the Persian province Scharnachie, and one in Skirvan, whence it appears

pears that this town, on account of it's trade and commerce, must have drawn some of it's inhabitants from very distant parts. A better conception may be formed of it's trade, from the little silver and copper-coins, found by the children in the fields. Among the silver ones, are many stamped with a pretty Arabian or Kufischian inscription. They consist of fine silver, are very thick, but seldom exceed the size of an English groat. There are also found some of an inferior silver, and badly stamped, having, on one side, stars or other little ornaments, F, on the others, some elevated points, a circle, or some whimsical mark, of the same kind with those used by the Baschkirians, (who are ignorant of the art of writing,) when they sign their names. I have given a drawing of them, but these marks are more general on the copper coin, particularly within the treble triangle G.



Besides

Besides these coins, neat toys wrought in fine gold and silver, have also been found; tho' these riches are now almost wholly exhausted. They brought me an abundance of jingling things made of brass and iron, besides several pointed hatchets, fastened to handles with wooden pins, instead of nails. I saw also some weapons, that are seldom met with, and which Strahlenberg gives a description of; and, a variety of corals, that have been turned with a lathe and afterwards burnt, having the form of large buttons, full of little holes, which perhaps may have been used, as the beads of a Rosary. Most of them were brick-coloured, some whitish, and others blackish; and, also some smaller ones of varied coloured glass, besides pieces of earthen pots, beautifully coloured. A person who could stay here in summer, might, giving himself the trouble, and gaining the confidence of the inhabitants, find out some valuable pieces of antiquity; but, it was impossible for me to do this in winter. And though I took all possible means to ingratiate myself with the people, I am perswaded that what I procured, was not the most rare and valuable. What a variety of these antiquities must have fallen then into bad hands! The Tartars, who come this way in winter, purchase the clothes and coins here collected with great avidity and care, and I was but just in time to procure some few articles. On account of the severity of the frost, and the deep and heavy snow, it was impossible for me to give that description

description of this place and it's environs which it deserves, and which I wished to do.

Simbursky. The rest of the winter I spent at Simbursky, examining into the animals and fisheries of this district; for the brass and iron manufactories in the neighbourhood, are scarce worth notice.

In the mountainous districts about the Wolga, the Russian marmotes are often met with, in whole troops or families, great numbers of badgers, and very fine ermine, and ferrets innumerable. But the common weasel, which throughout Russia and Siberia, becomes in winter, white as snow, is not to be found here. Mr. *Linnaeus* was unacquainted with the European weasel, only in it's winter fur, which changes white at that time of the year in all northern countries, like the ermine and the hare. (See Lapland and Norway.) It's fur in summer-time, is of a black-brown colour, but the fur of those which are bred in the southern parts of Europe, are of a beautiful yellow-red. I have seen the ermine from the Molucca Islands, which like the weasel, in the southern climes, never changes it's fur. *Buffon* justly asserts, that the ermine is an animal peculiar to northern countries alone.

The most common animal of all here, is the step-mouse, (*Mus Citillus*,) which in all the open deserts and heaths, between the Wolga and the Don, to the

53d degree

53d degree of latitude, has a most beautiful, spotted fur, and as it is easy to be caught, I wonder it is not. But in all the southern countries, situated from the eastern part of the Wolga to Siberia, this animal not only increases in size, but it's fur is grey and speckled, and it has a bushy tail, and resembles the marmot, both in appearance and manner. These districts swarm with pernicious field-mice, two kinds of which are but little known, the *Mus agrarius*, and the *Mus minutus*. They are generally found in the open fields, under heaps of corn set up there, in the Russian way.

The musk-rat, common in all the lakes about the Wolga, is also remarkable for it's fur, which is very cheap, and used only to border, common fur clothes. Notwithstanding this, it's wool is soft and fine, equal to that of the beaver in softness and brightness, and though shorter, perhaps might be equally good for the manufacture of hats.

Of the common sorts of wild fowls, there are plenty of the bustard kind, (*Tetrix*,) and partridges. Both are caught during the winter, in snares and nets. Woodcocks are scarce to be found, only in the pine-woods about the Wolga, and a species of grouse, (*T. Bonasia*) is sometimes met with, but as seldom. Of rare birds, I met here with the wood-pecker, (*picus tridaetylus*.) The smallest falcon, (*Falco minutus*,) which

which is not much larger than a thrush ; a kind of grey hawk, (*Falco rusticolus*,) called here *Lunn*, and a remarkably beautiful kind of blue tit-mouse *, common from the Wolga to Siberia ; and, the water-starling, (*Sturnus cinclus*,) may be seen, throughout the whole winter, in several adjacent rivers, which do not freeze, as the Uren, Kamajur, &c.

I don't believe there is a river in Europe so full of fish as the Wolga, including all its arms or branches. It not only serves all the neighbouring districts, but this river, and the Jaik, supplies the whole empire. Though the fisheries will be properly described in the lower parts of this river, I will mention what I saw here.

Those fishes, which are caught in the Wolga only, (not in its branches,) are the sturgeon, the horn-back, the huso or isinglass fish, and the salmon. The more common kinds are the barble, the shad, the gold-eye, and another called *Tschechon*.

The Bjeluga sturgeon is often caught in this river, from thirteen to sixteen feet long, and from 1200 to 1800 pounds in weight ; but, the smallest kind of this fish, which is most frequent, is five or six feet shorter than the former. The horn-back, (*Ossetr*,) is caught

* *Parus indicus Aldrovandi*. Raj. Syn. av. p. 74. n. 7.
from

from three feet in length to near six, and weighs from twenty pounds to eighty. The little huso, (*accipenser Ruthenus*,) which is peculiar to the Caspian sea, and has no other name, is not longer, when full-grown, than about twenty-eight inches, and weighs about twelve pounds.

They have also here another kind of sturgeon, not much bigger than the huso, but shaped like a sturgeon, and is very rough and thorny. They call it *Kostera*; but having compared many of these fishes of a different age, I am confident, that they are only young sturgeons, and that the older they grow, the more they improve in smoothness and fat.

The red-salmon which they have here, is only seen in the two last months of the year, and is even then very rare in the Wolga; but, the white-salmon comes up this river, from the beginning of January to June. They are from twenty-one inches, to three feet in length, and do not exceed 30lb. in weight. The barbel is somewhat heavier, and about four feet in length. But the general size is three feet. The shad, (*Som*,) has been seen here six feet long, and 120 pounds in weight. It is caught commonly in spring and autumn, and is thoroughly a fish, well known for his waving motion, in order to avoid the net, or tear it to rescue other fishes.

The gold-eye, (*clupea alosa*,) which, on account of it's colour, is called *Sheleniza* or iron-fish, or from a whimsical opinion, that eating it will turn persons mad, *Beschénaja Ryba*, or mad-fish, comes up the Wolga in prodigious shoals, from the beginning of May to the end of summer, and frequently load the nets, to the displeasure of the fishermen. The Russians throw this fish away, or sell it at a cheap rate to the Mordvines, and the people of Tschuwa, who eat them fresh, or dry them for winter provision. It is a fish that would eat very well smoked, and supply the lower class of people, if they could get rid of that foolish prejudice, that such as eat it, will go mad.

The Tschekon, (*Cyprinus cultratus*,) is caught in spring, in vast quantities, with the gold-eye, and is much of the same size, but on account of it's dry nature but little esteemed; of course, it is only eaten by the poor, sometimes fresh, and sometimes salted.

Besides these fishes, the Wolga and all it's branches are full of others generally known, perch, bream, trout, &c. But the eel is never met with, neither in the Wolga, nor any of the rivers or brooks that flow into it, nor in the neighbouring lakes, nor is it seen in all Siberia. But instead of the eel, they catch the quab plentifully, by hooks baited with pieces of fish, and laid in the winter-time underneath the ice. The
Wolga

Wolga is also crowded with crabs of an extraordinary size, but of a bad taste. The common people cannot endure the sight of them, of course, they are only eaten by the better class, and the inhabitants of great towns, who are free from these vulgar prejudices. They are caught plentifully in winter, by making holes in the ice, and letting down a round flat piece of basket-work, in the middle of which they tie a piece of fish, and when they crawl on it to get at their prey, are drawn up.

There is scarce a place in the world, where they make use of so many whimsical and ingenious machines or instruments for fishing, as on the river Wolga. Not to mention their common cast and drag-nets, their baskets, and bow-nets, they use another method, which is a kind of snare, and deserves to be described. Choosing such places in the river for this snare, where the bed of it is flat, to about the middle of the channel; at the bottom of such places, they drive in stakes, about half a yard asunder, across that part of the river, either in a straight line, or an obtuse angle, which opens downwards with the stream, the top of the stakes standing above the water. Against these stakes they place hurdles of basket-work, as high, as will reach from the bottom of the river to its surface. These hurdles are sunk between the current and the stakes, and kept in their places by stones and the

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stream,

stream, driving against them. This is designed to obstruct the passage and make the fish turn aside, to seek another way. Now, in some part of this basket-work, an opening or entrance, sixteen or eighteen feet is left, into a square place made in the same manner, and closed on three sides with hurdles, wherein the fishes swim; the third side of this square place being open, leads to other enclosures, in a kind of labyrinth, and all in the course of the stream, and inclining to the shore. Over these snares or enclosures, the ice is constantly broke, and over the holes a thatched shed is erected, to shelter the fishermen who wait here, and who have a fire occasionally, to warm them. The shed is large enough to admit the men to walk round the enclosures.

Now it is easy to conceive, that a fish, swimming along the hurdles to find a passage, must necessarily go into these enclosures; but, to know the arrival of such fish and seize it, the following method is made use of.

A piece of netting stretched on a frame, or a piece of basket-work, the exact size of the bottom of the enclosure is let down in each, with strong ropes fixed to each corner, to draw it up, when they have occasion. Over the entrance into these enclosures, is a small floating piece of wood, with a number of strings, that go down to the bottom, and are there fixed in a frame
below,



COSSACKS FISHING

Barney del.

J. Thornthwaite sculp.

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below, so that every large fish that enters, must necessarily touch some one of these strings, which moves the float above, and gives the fishermen notice. Over the opening in each enclosure, is a net, perpendicularly erected on a frame, which they can slide down by means of two perpendicular poles, at pleasure; and, as soon, as they know of a fish being in the enclosure, they slide down the net and draw up the frame and this net, at the same time, thus hemming in the fish, which they take with hooks. This done, they let down the frame again. Three men are employed in this business.

But not to be constrained to sit up the whole night watching, they have contrived a method, that the fish shall ensnare himself, and give notice to the fishermen. This is by hanging some stones to the bottom of the sliding net or grate that shuts up the entrance, and making it drop of itself, and this is effected in the manner of the door of the common rat-trap, by a small piece of wood fixed at the entrance into the enclosure, which gives way on being touched by a fish in it's passage, and communicating with a piece of mechanism above, lets the net or fall-gate down, and at the same time rings an alarm-bell, which wakes the sleeping fishermen, and gives them notice of the event.

This ingenious piece of mechanism is fixed in the river in summer-time, in proportion to the height of

the water, and remains there till the ice drives, in order to catch Wolga sturgeons and other great fishes, which swim up the stream. When the ice begins to drive, it is removed till January, and then made use of, till the breaking of the ice in spring, this being the season of salmon-fishing.

‘ Every spring and autumn,’ says *Tooke*, ‘ these hurdle enclosures undergo a thorough repair, and in deep waters, a number of divers are employed, to examine all the lower parts and amend them.’

‘ It is impossible for the most lively imagination to represent the extreme fatigue and the different hardships these divers undergo. Just before they go into the water, they drink a dram of brandy, and then get upon an oven made extremely hot, near the end of this hurdle fence. Here they continue half an hour, then wrapping their sheep-skin shube about them, they get into the boat, throw off their cloths, when they come to the place to be examined, make the sign of the cross three times on their forehead and breast, and are let down by degrees to the bottom of the river. In this suspended state, they are alternately drawn up and let down again, that they may examine the whole apparatus. Want of breath obliges them to be drawn up now and then, above the surface. This they repeat, till shivering with cold all over, they find their limbs begin to stiffen, and refuse to perform their office. They then take
‘ another

‘ another dram, repair to the oven to re-heat themselves,
‘ and begin their work afresh; and they repeat these
‘ alternatives of heat and cold, till the blood gushes
‘ out at their nose and ears, and they are cast half
‘ dead into the boat, which is constantly near them.
‘ The strongest of these divers cannot remain more
‘ than seven minutes under water, nor support these
‘ sudden transits from heat to cold more than five
‘ times a day: and, as it generally requires seven days
‘ to repair the works thoroughly, the diver is con-
‘ demned, during that period, to experience all the
‘ consequences of being stunned in this most violent
‘ and extraordinary manner. Their health, as the
‘ reader will naturally conclude, is much impaired by
‘ this tormenting practice, and none of them ever
‘ reach the ordinary term of human life, but die whilst
‘ in their youth. No man can follow this dreadful
‘ trade longer than ten years, and numbers are forced
‘ to relinquish it, in the third or fourth year.’

Among the various kinds of fishes caught in the Wolga, the several species of sturgeon, and the white-salmon, are the most excellent and profitable, as to price. The latter, as long as the frost continues, are transported fresh into the northern parts of Russia, but afterwards salted and smoked like the red-salmon; the art of smoking fish, however, they know but little of; if they knew better how to cure it, both kinds of salmon would be excellent food.

The various kinds of sturgeon caught in this river in summer and autumn, are put by hundreds into the large ponds, near the Wolga, which the floods leave in hollow places, in the low grounds, and are left there all the winter. They are dragged to these lakes or ponds, by ropes, passed through the mouth and out at the gills. As soon as the winter grows milder, they are taken out with a net, from underneath the ice, in these lakes, and transported in a frozen state.

The roe of this fish, which is the celebrated *Caviar* as they call it, is considered as the greatest delicacy, and the nicest part of the whole sturgeon, and is conveyed to great distances in this country, in winter-time, without being salted. The largest Wolga sturgeons will produce sometimes 200lb. of roe, and as five eggs of this roe weigh but one grain, it may easily be calculated, how many millions of eggs the roe of such a fish must contain, not less than near eight millions; but what is still more remarkable is, that though few fishes come up the river to spawn, no young sturgeons are ever caught or seen. The roes of other sturgeons do not weigh more than thirty pounds. In summer, they salt and export, in barrels, large quantities of this roe or caviar. The method of salting it is this. After the roe is cleaned of its skin and vessels, and well salted, they put it into boxes that have holes in the bottom, and press it with heavy weights, so that
the

the moisture drains from it. This done, they wring it in linen rags, press it into barrels, and pour fish-fat over it, to prevent it's corrupting. In other places, they preserve the roes of salmon and pike; scalding the latter in boiling water before they salt it, in order to remove it's viscosity: but, the plentiful roe of the barbel and bream, are considered as unwholesome, and given as food, to geese and poultry.

Of the other species of sturgeon, they throw no part away. It's intestines are partly eaten when fresh. A strong tendon which this fish has upon it's back, is taken out before it is salted, and when dried, sold as a great dainty, by the name of *Wesiga*. Of the air-bladders they make isinglass; for, this purpose, they choose those of sturgeons in preference, as having the strongest viscosity. These bladders are soaked in water, and after the external skin is taken off, the internal part, which is the isinglass, is rolled up and dried. The best sort is rolled up, the second best laid together in leaves like a book, and the worst sort is merely dried, and sold at a low rate. Farther down the river Wolga, they make a fine glue, by boiling the fresh bladders, and cast it in moulds of various forms. Upon the river Oka, where they have only the little huso, they beat the bladder out thin, in the state it is taken from the fish, and dry it. On the Wolga, they use shad-bladders for this purpose, but these they bruise and pass through a sieve. The strongest of this sort
of

of glue is used by the joiners. They have begun now in some places, to make fish-glue from the barbel.

The shad, amongst their large fishes, is the least esteemed, yet the skin of this fish, being thin and smooth, like that of an eel, when the skins of other fishes are thrown away, is spread and dried, and sold to the country people, especially those among the Tartars, to form their windows of, (see Lapland,) being as transparent as horn. They use also for this purpose, the peritonæum of animals, cleaned and dried. I found the shad-bladder excellent for covering of bottles, in which animal preparations are preserved, as it keeps out moisture, better than other bladders.

Tschirikowo. By an excursion to the village Tschirikowo, at the distance of twenty miles from Simbursky, I met with some other curiosities. This village is situated upon the brook Birutsh, which flows into the Swijaga, and which is not only remarkable for its trout and mother-of-pearl which is found in it, in common with other adjacent waters, but for there having been elephant's bones discovered there about the shores. I have myself seen some work made of an elephant's tooth, found 200 years ago in this place, which had taken a light yellow colour. Many other bones, particularly a skull of an elephant, have at sundry times been found in the banks of this river. I have also seen some workmanship of ivory, made of a tooth found

found here, equal to the foundest ivory, only that the point of the tooth was a little decayed. So, that it may be matter of wonder, that a bone could remain after a length of years past memory, without decay. In several spots, human bones they say are also found in great quantity. If this be the case, it will be no small matter of triumph to some writers who, ascribe all the elephant bones found in the northern districts, to former wars. But there are more probable arguments to ascribe these relicks to, which are dispersed as far as the icy ocean; to some higher and more important catastrophes of the earth.

1769. *March* 10. I left Simbursky on the 10th of March. A winter journey leaves but little opportunity for useful observation, and the road back to Stawropal is now sufficiently known, to need any more to be said of it. The winter-road was over so many heaths, and the snow lay so deep, that we were obliged to walk the whole night on the 10th, and reached Stawropal, the next evening.

March 16. Some little matters I had to adjust, detained me at Stawropal till the 16th. The chain of lime-mountains, which compose the shore of the Wolga, and are upwards of 700 feet high, are but barren walls of rocks and torn cliffs, but they please the eye by their variety, and strike it with wonder. The great quantities of birds of prey, that inhabit these rocky shores,

shores, building their nests here in summer, are beyond description. The whitish eagle, (*Vultur albicilla*,) is frequently met with on these mountains, even in winter; and, many beautiful hawks build also their nests in the cavities. Here is plenty also in summer, of a curious kind of wild-ducks, (*Anas rutila*,) whose feathers resemble the colour of the red-fox. There are a few reddish or black bears, and also some lynxes, in the thick forests of these mountains, not many martens, but a fine sort of large squirrels, inclining to white. The fur of this animal, is the second best in Russia.

About forty miles from Stawropol, near the mouth of the river Sok, is a high-hill, called Zarew Kurgan, with a round base. From every appearance, and every rational conjecture, this mountain seems to have been torn from the lime-mountains on the opposite side of the river, and to owe it's roundness to accidental inundations; but, according to common report, it is said to have the following, incredible origin. The story is differently told, but, the tenor is to this purpose: that in very early days, an enormous army, passing this district, the commander, in order to erect a monument to his power, is said to have ordered each soldier to carry a cap-full of earth upon this spot, and that thus the hill rose; but, what is much against the story is, the hill's consisting of large pieces of rock, which could neither be put within the small space of a cap, nor be
carried

carried by any one man. Some encrease this marvellous account, by adding, that the same army went back the same way, and having unfortunately lost a great number of men, each soldier was commanded to take away a cap-full of earth from it, and notwithstanding this, this large hill is still left.

In the neighbourhood of this hill, near the village Podgory, a manor, belonging to Count Orlof, stands the village Sernoi-Gorodok, to which the sulphur manufactory was removed in the beginning of this century, from the river Sok. It is built along the steep shore of the Wolga, at the bottom of that very mountain, where the famous massy sulphur is dug, and contains about forty dwelling-houses, and some buildings belonging to the manufactory.

The very day of my arrival at the town of Samara, it thawed, and the weather was so exceedingly mild, during the latter days of March, that soon after the heights of Samara were exposed to the beams of the meridian sun, they lost their hoary heads, and though it snowed violently on the last day of March and the first day of April, it so quickly disappeared the ensuing days, that on the 12th day of April, the meadows began to look green, and as the ice upon the Wolga daily decreased, I made a visit to some of the adjacent parts, before all the snow was melted.

By

By the middle of April, every appearance of winter was gone. Spring took its place; the palm and the hazel began to bloom, and all the heights were delightfully enamelled with the star of Bethlehem, the silver-weed, pheasant-eye, violets, and a kind of wind-flower, the *anemone patens*. The birches and service-trees put forth their leaves, and were followed on the 20th by every other bush. Before the end of the month, the wild apple-tree, which in this district is considered as the most common bush, began to blow, and all nature looked gay.

The aquatic birds were still earlier seen. On the 19th and 20th of March, we saw wild swans and wild geese, and on the 25th, the open waters were crowded with ducks. The lapwing's plaintive notes were heard on the 20th, and followed, before the end of this month, by every other water-fowl. I took notice that these birds came from the west and north-west, as they do in other parts of Europe; but, the birgander, (*Onocrotalus*,) the stork, (of which they have here a white kind,) and other land-fowls, came from the south. Among the land-birds, the first that made its appearance in the middle of March, was the crow, and at the end of March, the wild-pidgeon, the starling, the plover, and a kind of lark, (*Alauda Alpestris*,) which latter was as abundantly to be met with, during the whole spring, as the sparrow. In the mean time, the mouse, *Citillus*, which has already been mentioned,
crept

crept out on all those spots where the snow was melted, and coupled. The insects were not visible, but with the flowers; those I first saw, were some butterflies and glow-worms, but neither these nor the warmth of the days, induced a visit from the swallow, till the 16th of April, on which day I saw several, with the bee-eater, (*Merops*,) which convinces me they are birds of passage, or they would have appeared as soon as others. It has been said, that swallows, in winter, retire to the water, but the Russians know nothing of this fabulous account, or they would contradict it; for, there is no country that fishes so much, and sweeps the waters, frozen or not frozen, with all kinds of nets. The usual autumnal and heavy frosts drive all swallows from these districts early; but, in the milder parts of Europe, it may easily be conceived, that some of these birds, after having tarried too long, and become too feeble and disabled, from the rigor of the season, to take a long journey, may creep into the water, or some hollow ground.

Samara. Before I proceed farther, I will give the reader some short account of the town of Samara. This place is situated on the angle which the northern mouth of the river Samara forms with the Wolga, but stands chiefly on the Wolga bank. It was formerly a garrison, and had a wooden fort, but was burnt down in 1703. In 1704, they erected a new one, with defiles, on a hill, on the eastern side, between the Wolga and

and Samara, which is to be seen. The chief support of this town, which continues to flourish, is breeding of cattle, and their great commerce is in fresh and salt fish, and roe, (*Cavear.*) To carry on this trade, when the weather is open and the roads passable, they travel over the steps in caravans to the river Jaik, to sell their provisions to buyers or merchants, who come there from all the northern and western districts. On account of this commerce, they throw a temporary bridge over the Samara to a road, that leads straight to the capital of the Cassanians, who live near the river Jaik. On this road, there are many way-houses at certain distances, for the accommodation of travellers.

The inhabitants of Samara, have some fisheries on the Wolga, at a distance from the town, but in certain reaches of the river, which they consider as belonging to them. Besides their own cattle, they traffick with the Kalmucks for sheep-skins, and tallow. They have no manufactories, except a few tanneries, without the town, and some very inconsiderable ones of hides and silks. The citizens or burghers of Samara, belong to a court dependant on the regency of Casan; but, the people of Casan, that live in and about Samara, are numbered among those of the district of Orenburg, and formerly, the whole town belonged to it.

In winter, Samara is full of trading Tartars from Kasimof, who come here with lamb-skins, which they barter for with the Kirgians and Kalmucks, and which they bring here to get tanned and sewed together by the christian Kalmucks who reside in this town, before they carry them to Moscow, and other places. Most of the fine lamb-skins sold in Russia, are brought from this place, as also the skins taken from the legs of lambs and sewed together by the Kalmuck women, and which are sold as furs. The thread used for this purpose, in common, is drawn from Russian linen, in lengths about an ell long; but, what they use for themselves, is made from the divided sinews of animals; a kind of fine cat-gut.

The ice no sooner leaves the Wolga, but a great many ships and barges are seen, passing and re-passing to and from Astrachan, into the internal parts of the Russian Empire, and some, frequently, at anchor here. Those that sail down the river carry timber, and wood of all kinds, wooden and earthen vessels, iron, foreign goods, and all sorts of corn; those that go up the stream from parts below, are laden with Astrachan goods, hides, tallow, and salt.

The environs of Samara consist chiefly of wasteland and heath, rising gradually into high hills. In the snow-drains that run into the Samara, are found many beautiful pebbles and flame-coloured agates, im-

pressed with figures, as if frozen. Many of these have been long collected and polished, at Catherineburg.

The hills that lie up the river from Samara, and form it's mountainous shore, are so happily situated, and have so fit a soil, that there is no place in the whole Russian empire better adapted for trying the cultivation of vines : and such trials, if made by experienced vine-dressers, with such vines as love a loamy soil, must surely meet with success. Here might also be cultivated other things, which require a warm climate, and thrive in the southern parts of Europe. But not the least attempt has been hitherto made to introduce any thing of the kind, except pimento, and the common water-melon. The water-melon gardens are upon the heath, on both sides the river, and are open to the waste. They plow the ground, sow the seeds, and take no farther care of them, than occasionally to water them in dry weather, and when the fruit is ripe, leave it to be gathered by children. As they raise a great quantity of this fruit, they salt and pickle it as we do cucumbers, but I don't remember ever tasting any thing so nauseous. Some stew them, and it is said, they are then very sweet.

The pimento, of which great quantities are raised at Astrachan, is sold by the name of cod-pepper, or red-mustard. It is sown in the same way they sow cauliflowers, *viz.* in flat boxes, raised from the ground. In
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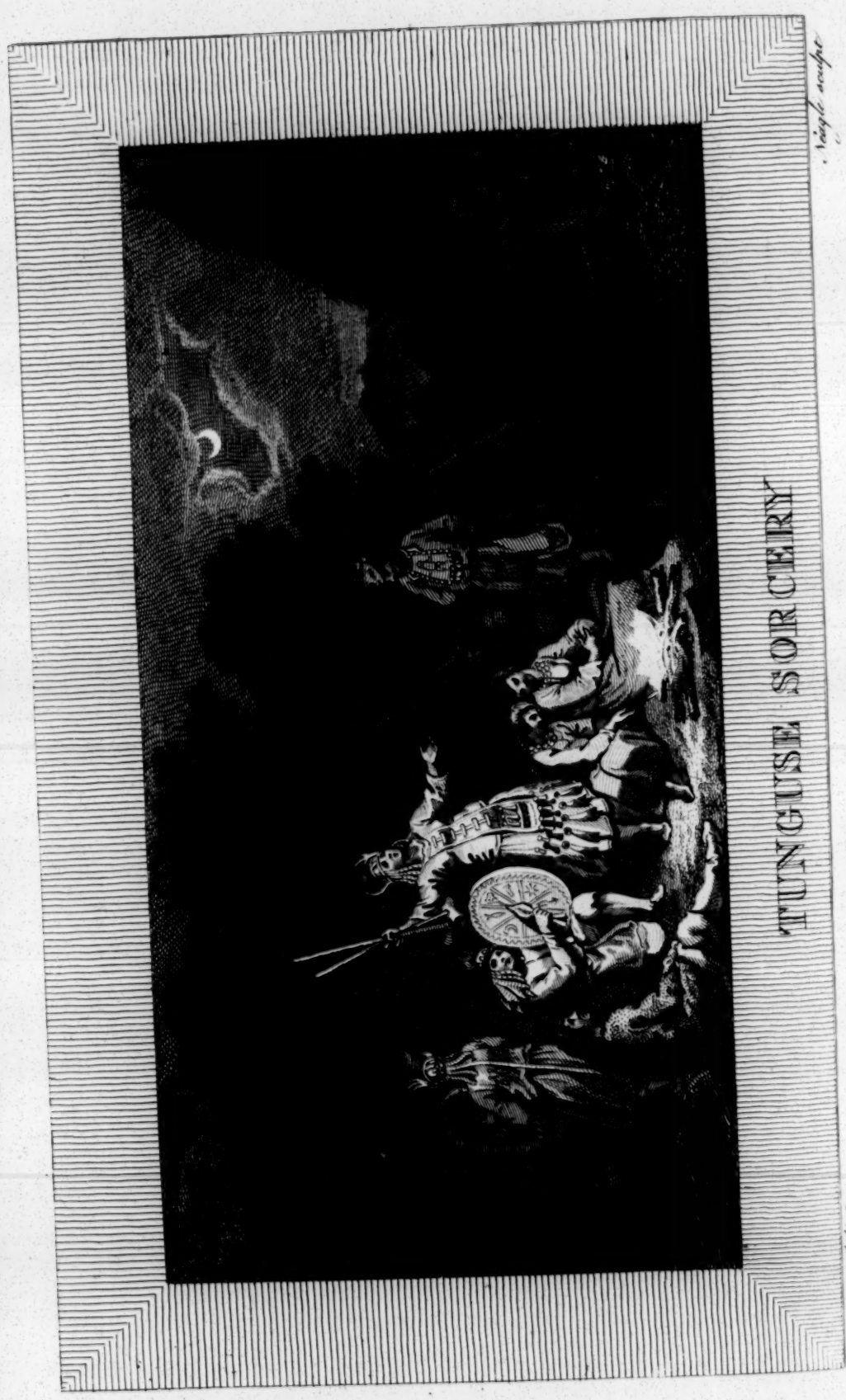
the month of July, they remove the seedling plants to beds in a garden prepared for this purpose, in rows, at some distance from each other ; and water them till they seem to have taken good root, and are pretty strong. It seldom happens, that an early frost prevents the ripening of this fruit. The ripe pods after being dried in an oven, are reduced to powder, sold at the rate of nine shillings or less, for thirty-six pounds weight, and are used by the common people as a spice. Many of these pimento and water-melon plantations, are made only about the end of June, in those hollows, where the water stood all the winter, and at this season is dry, and yet their fruit ripens. They have begun here to plant apple-trees, which flourish very much about Simbursky, generally called *Simbirsk* and Syfran ; but, the increase of caterpillars and other destructive insects, is much against this useful branch of gardening.

Yet there are many wild fruits, apple-trees, almonds, very tall and bushy cherry-trees, (*Cerasus pumila*,) and of a very spicy flavour. The juice which they squeeze from them, is sold very cheap, will keep two years, and makes a regaling summer-drink ; they have made a successful attempt to transport it to Moscow, as soon as the river is open. If this juice is suffered to ferment, it makes an excellent, spicy vinegar, and if good, is as nice as the best cherry liquor. These cherry trees or shrubs, and almond bushes, are handsome garden hedges, on account of their early bloom ; and

for a living fence, no better tree can be made choice of than the wild-apple, which is, properly speaking, formed so by nature. Besides, here are some remarkable and beautiful shrubs, to ornament a northern garden, as the maple, (*acer Tartaricum*;) the false acacia, (*Robinia frutescens*;) the diosma, (*Spirea crenata*,) the broom, and the upright honey-suckle, (*Lonicera Tartarica*.)

Besides the above-mentioned, vernal plants, the heights about Samara produce some remarkable and curious ones, that bloom in May and June, to some of which there are no English names, but I have given such as most resemble them. The *Onosma echioides* and *simplicissima*; the clove July-flower, (*Dianthus proli-fer*;) the virgin's bower, (*Clematis recta*;) the spurge, (*Euphorbia segetalis*;) the sage, (*Salvia nemerosa* and *nutans*;) the sage-tree, (*Phlomis tuberosa* and *Herba venti*;) the dragon's-head, (*Dracocephalum Thymiflorum* and *Sibiricum*;) the cat-mint, (*Nepeta violacea*;) the French honey-suckle, (*Hedysarum Onobrychis*;) the milk-vetch, (*Astragalus pilosus*;) The *Grandiflorus*, *Contortuplicatus*; the Moscow and Siberian centaury, the thistle, (*Carduus cyanoides*,) and the elicampane, (*Inula hirta* and *odorata*.) Among these plants, none is more known than the *Onosma echioides*, which has a long root, seemingly dyed on the outside, with a beautiful red. Young maidens gather this root and paint their cheeks with it, on which ac-

count



TUNGUSE SORCERY

single engraving

Barney dehn

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count it is called by the Russians, *Rumaniza* ; by the Tartars, *Krschab*.

Here grows also spontaneously a wild asparagus, but seldom so large as the little finger. Though it is good to eat, the inhabitants are either ignorant or careless of this gift of nature.

Among the remarkable animals of the district of Samara, the squirrel, (*Sciurus glis*,) which they fatten in Italy for the table, deserves to be noticed. I have found this animal in the rocky cliffs of the eastern mountains, and tried to make this and other animals which sleep all winter, as the Urchin and *Mus citillus*, sleep, by shutting them up in an icy cave in summer-time, and succeeded, for on looking at them a few days afterwards, I found them quite insensible.

Of all the little animals found in these steps or wastes, the most beautiful and remarkable is the dwarf kind of hare, not larger than a rat, almost the colour, and having all the form of common hares, except the ears, which are round and shorter. This little creature leads a solitary life in spots, overshadowed with bushes, where it digs holes like a rabbit, with several passages leading to them, and hides itself all the day. At twilight it steals abroad in search of food, chirps like a quail, and may be heard at night, and before dawn, at half a mile distance. The country people listen to

the noise, but are at a loss to know from whence it comes, being wholly unacquainted with the animal. It brings forth towards the end of May, from four to six young ones, which like young rats, are blind and naked. In winter-time, it makes trenches in the turf, and seeks it's food beneath the snow.

The musk-rat, (*Sorex moschatus*,) is another uncommon animal, seen frequently on the river Samara, and the lakes. It is generally caught in those basket-tools fixed in the river for catching of fish, and is commonly found suffocated, tho' it's internal parts are formed for living on the water. This animal makes it's nest in holes, under water, in the banks of the lakes, but as they work the hole upwards, the further end is above the level of the water, and of course, lies dry. In winter, it has no air but what it receives below the ice. As soon as this begins to melt, it is often seen playing on the surface, and basking in the sun. It has a very sensible and flexible snout, which it can turn into it's mouth, and with which it digs up worms and leeches in marshy grounds, on which it feeds, muddling in water, like a duck. It's eyes are smaller than the mole's; if provoked, it squeaks like a mouse, and bites dangerously. It's entrails when fresh, have a strong, sulphureous smell, but the musky scent which proceeds from it's glands, beneath the scaly skin of it's tail, is more powerful, than that of musk itself. *Linnaeus* has
classified

classed this animal in the genus of beavers ; but, according to it's marks, it is a true forex.

It must easily be conceived, that so warm a district as Samara is, in the summer, must swarm with insects. The common grey and green lizards are here in such quantities, that strike a bush, and you will drive out numbers ; they bury in the ground under high grass, and their holes have two entrances to each.

Among the insects, I took notice of an uncommon large tarantula, with which the environs of Samara swarm. These insects will make holes two feet perpendicularly in the solid ground, where they lie all day, and never quit them till night, when they seek their prey. Though this insect very much resembles the Apulian tarantula, I never heard of any ill-effects from it's bite, and yet the peasant's children, frequently digging them from their holes, to draw a kind of thread out of their skin, are frequently bitten. I was once bit myself, and a Casanian whom I employed to look for some, was bit till he bled, the wound swelled, and was painful for two or three days, but this was all.

Spanish flies are here caught in quantities during the month of May, and supply all the apothecaries shops in this country. Indeed, this district is very rich in curious insects, and I never saw any, where so many of the lice-kind called, *acarus reduvius*, and *ricinus* ;

the bushes about Samara are full of them, and one cannot go into the fields, without having one's cloaths covered with them.

Among the remarkable things in the district of Samara, I must notice the bones of elephants and buffalos, that are often fished out of the river, or found upon it's banks. I met with a buffalo horn, which, independant of the broken point and lower part, weighed upwards of six pounds, and it's greatest diameter was four Paris inches.

May 1. Schelechmet. The spring being now very favourable, I pursued my way at the end of April, to Syfran, about sixty miles distant. In my way there, I passed through the Mordvine village Schelechmet, where I was present at a nuptial ceremony, the most remarkable parts of which were as follow. As soon as the bride returned from the church where she was married, and from which she was brought back in a waggon, (with the bridemaide by her side;) and, over which a large, white linen sheet was spread; she was taken by two friends of the bridegroom, and conducted howling, to the door of the bridegroom's house, where she was greeted by all the neighbouring females. Afterwards came her mother, with a round-bottomed pan full of dried hops, which, setting fire to with a match, she placed at her daughter's right foot, and which the bride was immediately to kick away. This is done
three

three times. Each time the pan was filled with fresh hops and fired. When she kicks the pan from her, they attend particularly to the manner in which the pan is overturned, as, if it tumbles one way, it is considered as portentive of dire disasters to the young couple, if it falls another, as ominous of future happiness. It reeled about and settled with the hollow side upwards. This is a token of good-luck, and gave joy to the whole company, who were pretty well intoxicated, and called loudly for more beer, which was brought them in a cup, into which the bride threw some neat rings, (many of which she had upon her fingers,) and before she was suffered to enter the house. This delayed much the succeeding ceremonies, which I did not think worth while to wait for. But I was told, that prior to this, a spoonful of thick stir-about, made of oatmeal, was to be distributed to each inhabitant of the village, given them either in their hats, or on a corner of their coats, as most agreeable to the receiver.

Walofka, 15 miles from Samara. At a village called Walofka, about fifteen miles from Samara, is an extensive, Tartarian fortress, near half a mile in circumference, with a treble ditch and bank; but, there are no buildings on it, nor any vestiges of buildings, but in ploughing the fields adjoining, Tartarian bricks are often found; perhaps, the remains of some hidden graves.

The

The great road to Syfran, is over some high and open hills, but under a species of cultivation. Their method of husbandry, may appear odd to a stranger; but what I relate, I saw. The countryman sows his oats, millet and rye, on a spot of wild, lay land, which he conceives not to want manure, as if he destined it to be eaten by birds. He then plows it, and another horse following with a harrow, but without a driver, compleats the work. Thus, one field after the other, is sowed, ploughed, and harrowed, by a single man, and two horses. In sowing wheat and barley they take a little more pains, this being their festival food, (for they brew their beer with malt, as we do,) and indeed it would not thrive by such a mode of husbandry. If the field is very distant from the village, the husbandman takes his provisions with him, and continues day and night upon the ground, till his land is all sown, or he is called home, by the solemnity of his sabbath. On these hills is seen a kind of mouse, (*Mus talpinus*,) that lives on certain roots, which it seeks, by throwing up the ground that covers them.

May 5. On the fifth of May, I went to see the wonderful, rocky shore of the Wolga, in the neighbourhood of Kostytschi. This village, consisting of about 300 houses, and a wooden church, is erected on the steep and rocky banks of this river, between fifty and sixty feet higher than the water. The wall of the river is near a mile in length, and is formed of a yellowish

yellowish lime-stone, in which are a number of cavities and natural grottos, from twenty to thirty feet deep, producing a very beautiful effect. These excavations can be ascribed only to the dashing waves of the Wolga, which wash away the earthy layers, and excavate the stone itself. Higher up, this rock strikes the beholder with the idea of a dreadful ruin. The cliffs are inhabited by ring-doves, crows, and little birds of prey, which do not quit their situation even in winter. I found here a beautiful kind of water-wag-tail, (*Motacilla Leucomela*,) no where to be met with but in this rock, building it's nest in the cliffs. In the water-drains near this village, is found a great deal of salt-petre.

The stone of this rock is penetrated very generally with something like a pitchy substance, which is certainly brought here by the water in a fluid state, and settled; it is black and shining, and taken out in pieces that weigh many pounds. It is very brittle and crumbling, but of an inflammable nature, and will burn in the candle like sealing-wax. Indeed, by an addition which takes away the roughness, a beautiful sealing-wax is made, and I was informed, that a merchant who formerly lived there, obtained an Imperial grant to manufacture sealing-wax from it. I was told also at Samara, that this jet, with some other dug at Tetjuschki, was formerly conveyed to the sulphur manufactory at Sernoi Gorodok, where they pressed from it
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an oil, used in the artillery. At present, this mineral is applied to no other use, than for smiths to blacken or lacquer their iron wares.

Syfran, May 5. I reached Syfran on the fifth of May at night. The greatest part of this town is delightfully situated on a height, which occupies the northern angle, between the rivers Krymsa and Syfranka, into which latter the former flows. A small part of the town, together with a well-built cloister, lies on the southern bank of the Syfranka; the rest, which is meanly built, lies on a flat, along the Krymsa. Here is a decayed wooden fortress, a stone-built church, and a court-house; but, as the place is not well supplied, few of the inhabitants are rich. They apply themselves a good deal to gardening, and have many orchards of apples. They breed a good deal of poultry, and with these the Astracan swan-geese. This bird intermixes with the common goose, and its progeny will couple with themselves; of course, the breed is mixed. The pure bastards partake of the nature of both the swan-geese, and common geese, as to size, shape, and colour, and mixing further with common geese, the young ones are of a blackish hue. All their bills are red, and bent, and have sometimes a little prominence at the upper end.

Kaschpur, 7 miles from Syfran. The borough-town of Kaschpur, through which I passed, is situated on a
high

high hill, upon an arm of the Wolga. This hill forms part of the Wolga's left shore. It is one of the most ancient Russian habitations of this district, and as far as is known, was built before Syfran. It has three churches, and belongs to the chancery of Syfranka. At the south end of this town are still remaining, four decayed towers of the old fortress, and at some little distance there is a watch-tower. In the middle of this town, which lies open and scattered, rises a very high chalk hill, in form of a sugar loaf, which can be seen at a great distance. About this hill are some old dung-hills, mouldered into a rich, black soil, which by the addition of chalk, produces a great deal of salt-petre. I found whole tracts so wholly chrystalised with it, that it looked on the ground like snow, and I could have gathered it in handfuls. Indeed, all the land round this place is so full of salt-petre, that the cattle eat the very earth. Coal is also dug in this neighbourhood.

May 10. I intended to leave Syfran on the 9th, but not being able to get horses, on account of a festival on that day, kept in commemoration of *St. Nicolas*, I delayed my departure till the next day at noon. The heat was insupportable, but the flying clouds seemed to promise us some refreshing showers. The air was like a furnace, and the heat so intense, that the mercury in the thermometer stood in the most airy and shady place at 105; on the 12th of May, it fell to
93 degrees,

93 degrees, and often in the sun to 85 degrees, a heat so great, that it was impossible to continue a minute in the sun-shine. All nature was languid and panting, the soil on the black heath cracked above an ell deep, and the apertures were some inches wide. I left Syf-ran about five in the evening, for it was too sultry to travel in the day ; and, the great swarms of ox-flies, (*Tabanus bovinus* and *tropicus*,) were very troublesome and tormenting to the horses, while the sun was near the meridian. But, in this scorching weather, I took notice, that among the bushes on the wilds, bloomed the common piony, the fragrant and white dittany, and some others.

I was detained at the next village by a melancholy circumstance ; a gun that had been loaded to shoot wild-geese, accidentally went off, and shot my German servant in the hip, shattering it very much ; humanity therefore required, as he was mortally wounded, that I should convey him to a place, where he could have some assistance, and as Stawropal was not a great way off, I sent him there by water upon the Uffa, and continued my route without him.

At Uffolie, at the bottom of a mountain, is a considerable salt-well, which makes this district interesting. The spot where the well stands, is now overflown with water, by an adjoining river, but there is still to be seen some remains of the old works, by which the salt-water

water was conveyed into pits. The principal people of this town, in whose jurisdiction this well is, ordered it to be filled up with rubbish, but the water has puzzled it's way out again, in several, little veins betwixt the stones, and depose a whitish, sulphureous sediment. This water has a nitrous appearance, and a strong, sulphureous smell. There are one or two more of these wells, at a little distance from the first, and certainly issuing from the same mountain.

In the course of our journey onward, we passed some bare hills, where a great number of marmots were every where seen sitting, at the entrance of their habitations or holes, hissing, as if they meant to insult the passengers as they rode by. When we came to the village Sewrjukowa, which takes it's name, (as is often customary among the Tartars, and people of Tschuwa,) from him who erected for himself the first dwelling there, and is now inhabited by the unconverted people of Tschuwa; the peasants were preparing a great sacrifice for the next day, to solicit heaven in their way, for a fertile rain. On account of our arrival it was postponed, and however desirous I was to be present at such a solemnity, I did not find myself disposed to urge them to a compliance, contrary to their inclinations.

May 23d. On the 23d of May, I returned to Samara, and Professor *Falk* with me. His design was to have

have taken another route, but not finding himself well, he thought stopping at Samara for a few days might recover him. I must not omit mentioning here, the *Gypsophila panicula*, which was now in bloom. This plant grows upon the heaths, and towards autumn, when it begins to fade, forms itself into a round ball, which is often broke from the stem by a gust of wind, and rolling over the waste, often frightens the horses of travellers.

In the neighbourhood of Samara is a place, to which the sulphur works have been removed from the district of Sergiesk, and consisted of the manufactory, a wooden compting-house, and about forty dwelling-houses, spread out in form of a street, along the high shore of the Wolga, in which dwelt the workmen; but, as these works have been discontinued, and the workmen are removed, only twelve huts are remaining. This sulphur manufactory was subject to the Woiwods or magistrates at Samara, till the year 1720, when it was granted to major Iwan Molostof, who was the proprietor to 1757, when the whole was granted to one Iwan Martof, a merchant of Petersburg, whose son ceased working them for five years, and then deserted them. In this manufactory, twenty-two superintendants, and 576 workmen, chiefly from Sergiesk, were employed. These men relieved each other every month, so that about 130 worked at one time. The annual produce of this manufactory was full 60,000lb.
of

of brimstone, and might easily have been increased to 80,000lb. Thirty-six pounds weight stands the proprietor in from fifty to eighty copeks, (100 copeks are in value 4s. 6d. English,) and conveying it to Moscow in winter, with hired horses, costs him twelve copeks for 36lb.

The loss of this sulphur-manufactory to the state, cannot be enough lamented; for, as there is plenty of fire-wood in the place, was it properly conducted, it might turn out to advantage. The buildings of the present works, are a melting and refining-house. The melting-house is about 350 feet long, and contained 51 brick furnaces, some of which now are in ruins. The brimstone ore being first bruised, is melted in these furnaces in earthen pots, from which the pure sulphur is suffered to run into receiving-vessels below, placed in wooden troughs, filled with water. In order to refine it, it is melted again in ovens, and afterwards poured into moulds, standing in a trough of water. When this manufactory was first set on foot, the furnaces had no chimnies, the consequence of which was, that many of the workmen died of slow fevers and consumptions; but this is not the case now.

The famous mountain, in which sulphur is found in masses, rises almost perpendicularly from the shore of the Wolga, opposite the mouth of the river Sok or Soka, to a height of 700 feet. The lime-mountains near it are

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still higher, and the valley between them is covered with wood, with villages interspersed. The cold in this valley is uncommonly great, even in summer-time, which induces the fishermen, who are employed on the river Wolga, to lodge here at night, in order to avoid the flies, which dare not venture into this cold air. I have been told by some Casanians of Gurgef, that going from the mouth of the river Yaik, (or Jaik, for the jod *ѣ* in Russia, is pronounced like a *Y*,) along the coast of the Caspian sea to Astrabal, there is, at a place called Pristan, between Tukkaragan and Tjutkaragan, a deep valley between the mountains, where these very Casanians, who were sent from on board to fetch water, could not, on account of the insupportable cold, stand it, but were obliged to return to their ship, without their errand.

In order to ascend this sulphureous mountain, which is covered with under-wood, I was in many places obliged to creep upon my knees, no path having been cleared away; and it was so exceedingly steep, that I was often forced to climb my way. It is inconceivable, that after working many years here, the people have not opened a horse-way, and rendered the path up it easy, by gentle windings. In which case, they might bring the sulphur down on horses; whereas, it is now attended with a great deal of labour, the men carrying down the stone in masses of 100 pounds weight, upon their shoulders. And yet, though the
way

way up and down is steep and rocky, and dangerous to a person passing it, without a load, I did not hear of any accident happening to the men. The sulphur in this mountain lies very deep. There is one opening on the top above 70 feet wide, and upwards of 40 feet deep. They have worked ten years in this pit, and the sulphur vein does not seem near exhausted. Other parts of the mountain consist of lime-stone, stucco, and Muscovy talc. There are springs on it uncommonly sulphureous, but clear, and ice and snow dwell here the whole year. Of the under-wood growing on it, I saw, the Russian plane-tree, the buck-thorn, (*Rhamnus catharticus* and *Alpinus*,) and the following plants; the hellebore, (*Helleborine*,) in quantities; the lady's slipper, (*calceolus*;) the wind-flower, (*Centaurea Moschata*; the laserwort, (*Laserpitium trilobum*;) the agaric, (*Amanta cervaria*;) the chichling vetch, (*Lathyrus*;) and the vetch, (*vicia pisiformis*;) and, also the stock gilly-flower, (*Cheiranthus erysimoides*.) Upon the latter were great swarms of beautiful insects, and butterflies. The stalks of the *Cervaria* sent forth here a sweet, aromatic gum, that melted in the mouth, which they did not do in any other part of the heath.

Samara, May 30. The weather was now warm, and the ox-fly very troublesome. Here were such swarms also of a kind of gnat, that often darkened the sky, and bit us so deep, as to leave the wounds bleeding. The inhabitants have no other method of defending

their faces from this pernicious insect, than by drawing over their head a large net-cap, soaked in birch-oil. Every person that goes out of town, provides himself with such a cap. Though this insect bites till the blood runs, it happily gives no pain. On cattle and on birds, it gets in among the hair and feathers, and runs about like a louse. This insect, called the *Moskara*, leaves them about the end of June; but, another very troublesome one comes in it's room; this is a kind of wasp, almost invisible, (*tipula solstitialis*,) which does not sting, but flies about in such swarms, that a person cannot stand still a moment, without having his mouth, nose and eyes full of them. They call this insect *Kochra*, and defend themselves from it by large nets, greased with hog's-lard. Here also grows, in bushy places, the campion, (*Lychnis Chalcedonica*,) which the common people call cuckow-soap, and use it to wash their hands and linen.

I sent part of my attendants on before me with the heavy baggage, from Samara across the Kalmuc wastes to the river Jaik, stopping to take a further view of this district myself, before I left it. I followed them however, on the 11th of June, but before I had got half way to the place I ordered them to, a new accident interrupted my progress. The waggon, in which some persons I had taken as companions, rode, was overthrown from a height, and two of my people were hurt; one was exceedingly bruised on the hip, and my
waggoner

waggoner had his right hand shattered. I sent these men back to Samara, and proceeded with the rest to Orenburg, passing through Alexieffkoi, inhabited by invalid soldiers and Casanian tradesmen and farmers. From this place to the town of Kafakian, the road lies straight, but there are no regular way-houses for accommodation, a few cottages only excepted, scattered here and there, but where we could get hay and water. The summer-road to Orenburg from Alexieffkoi, is over the hilly or left side of the river Samara; but in winter, between the Samara and Kinel, through alternate vallies and hills, for the space of seventy miles. I went the winter-road, and fancy can scarce paint a prettier district; the most beautiful woods of asp and birch, relieved, by turns, with green hills and luxuriant meadows. No country surely deserves cultivation more than along the river Samara, there being plenty of arable land, no want of wood, and great extent of very rich and beautiful meadow. Here are a great many wild roe-deer without tails, (*Cervus pygargus*,) and elks which rove about, as far as the river Samara.

The elk in winter, mostly feeds on the young twigs and the bark of the asp and poplar-trees, but in summer-time, seeks it's protection and nourishment in the steps or uninhabited wastes. The roe is more found on the hilly districts, the wind carrying off the snow quicker in winter, than in the low-grounds, and thus giving it an opportunity to feed more plentifully. The

Cossacks kill a great deal of this game, and the chief season of hunting it is in March, the sun then having sufficient power to melt the surface of the snow into a crust, on which they can more readily come up with them in their snow-shoes, a contrivance used by the Laplanders also; whereas, the feet of these animals break through the snow as they run, and are thereby impeded in their course. They are tracked and driven into valleys, where the snow lies many feet deep, and are thus brought within reach of a gun, or are more closely pursued and killed with a lance. The roe, being a tender-footed animal, cannot run far; but the elk, which is hunted by dogs, will often kill a dog by a kick. The roe-buck throws off his heavy horns in November after rutting time, and gets new ones in spring. The female roe, commonly brings forth two young ones about the month of April; her horns are nearly like those of the buck, only more grown in spring, but are yet rough and soft. Their skins are sold very cheap. The skin of the elk is worth about 4s. 6d. and their meat fetches but a low price.

Besides the above animals, they have, farther along the Samara, great plenty of very fine ermines, and a middle-sized marten, with a bright, yellow neck. There are also upon the steps or wilds, some few beavers or otters, as also foxes, and those Cossacks who are fond of hunting, will, in autumn, lie for some time abroad on these steps, to watch for them. Foxes are
less

less valuable, the further south they are found up the Samara, till they degenerate into those grey, step foxes, which the Kirguisians bring here to barter or truck with the Kalmucks. The squirrel is rarely seen here ; but is much sought after, on account of it's fur, which is of a whitish colour.

The country along the river Kinel, is pleasant and varied. The large village Tschersk, has been built since the year 1744, by a colony from Little Russia, who had formerly erected many dwelling places on spots about the boundary, at the river Jaik, but were often plundered by Kirguisian robbers. The inhabitants of this new flourishing place, live after their own country fashion ; they have neat houses with chimnies, good ovens, apply themselves chiefly to the cultivation of tobacco and breeding of cattle, and live in abundant sprightliness and freedom. They are governed by an officer chosen from among themselves, and confirmed by the regency of Stawropol, whom they call *Ataman*, and who has an assistant under him, called *Jessaul*. Their dress is like that of the Kossacks or Polanders. The women wear nothing in summer but a shirt, worked in the neck with needle-work, and instead of a petticoat, they wear round the waist, a piece of calimanco, plaided with various colours, and woven by themselves, very much like the Scotch plaid. They wear on the head small caps of varied coloured stuff, bound on with strings, whose ends are worked

with the needle, and hang down behind. Girls let not their hair hang down as do the Russians, but braid it into tresses, wind it round their heads, and bind it in front with a party-coloured band, ornamented with coral beads, &c. Their method of courting, is not exactly like that of the highlanders of Friesland, but very similar to it, and they have many ceremonies similar to those of the Tartars. A courtship continues about two years, during the first year of which, the young man is not suffered even to touch his sweetheart. On the day of marriage, a kind of flag is carried after the bride on her return from church, made of black or red stuff, as the bridegroom shall think proper, and which he makes choice of, to acquaint the world with her conduct, it being a signal to say, whether she has acted to his liking or not, during the last year of their courtship, when he is entitled to take more liberties.

For the purpose of sheltering and feeding their cattle, they erect sheds or stalls here and there, on the wastes. Their chief breed is horned cattle, and they generally plough their land with oxen, though many of the farmers possess from twenty to thirty horses. Their flocks of sheep are numerous. Many keep to to the number of four hundred, but they do not consider their wool as the best, it being rather long and coarse. They do not suffer the ram to be with the ewes till after St. Peter's-day, which in the Russian Calendar is at the end of June, a good custom to prevent the

the lambs being dropped too early. They are careful to keep their cattle clean, and spread hay beneath the sheep in stalls, to prevent any injury to the wool, which will fetch twelve or thirteen shillings a pud, that is 36lb. They never have any murrain among their cattle; the only distemper is a kind of itch, which they cure with tobacco water, and as a remedy for maggots in sheep, they use the agrimony.

The cultivation of tobacco is the employment of the women; who sow also large quantities of vegetables for their own use. But, want of rain this year, had destroyed not only their garden-stuff, but all sorts of corn.

From the middle of June to the middle of July, women and children are busied before harvest, in gathering that kind of cochineal, called *Coccus Polonicus*. They find this insect chiefly on dry, barren soils, about the root of the common strawberry and the cinque-foil, (*Potentilla reptans*.) In Little Russia, they are said to collect them from a plant called *Smolka*, which, according to the common opinion, is the St. John's wort. They cut out these plants with a knife, and open the little, blue blisters which hang on the uppermost part of the plant, in which, the insect is said to be contained. There are two or three such blisters on a plant. The insect comes to perfection, sooner or later in the month of June; and in July, creeps out. This plant is well known

known to the women. But they prefer the insect when it is just ready to leave the plant, in preference to those in a less perfect state, as it yields a better and a brighter colour. There is a saying among them, that all the eloped insects of a whole district, assemble themselves on one bush, on a certain day, and that those who go out earliest in the morning, on the Casanian feast-day, (June 8th,) will surely meet with them. The cochineal when gathered, is cleared, through a sieve, from the earth that hangs about it, dried in a pan over a slow fire or in an oven, and then put away in some dry place. Owing to the great trouble in collecting them, they never search for more than they want for their own use, in order to dye their girdles or some woollen yarn, which they use as an ornament to their dress. They soak this yarn twenty-four hours in a very sour decoction, in which allum is mixed, letting it stand all this time in an oven; after this, it is wrung and dyed. This done, the cochineal is bruised in a pot, boiled up with water, and when all the colour is extracted, it is strained, and the yarn boiled in it. With one handful of cochineal, they dye about a pound weight of wool; but this colour does not look better than that prepared from the marjoram, (*Origanum*;) it is preferred only, because it fades less.

In this high and wild country, there are Marmotes in plenty, many bears, inhabiting the bushy vales, bustards and cranes, and in the rivers, tortoises.

On

On the boundary of Samara there are several forts, each garrisoned with about thirty invalids, and inhabited by Cossacks, with some pieces of iron ordnance. At one of the forts, that of Busuluzkaja, situated near the brook of the same name, the commanding-officer of the line or boundary has a very good house, and the houses of the Cossacks and soldiers, form four cross streets, as they do in the other forts, the church standing in the center, in a kind of square. Among the Cossacks here settled are many Tartars, who hunt the mountains and deserts, and kill wild horses for food. These are not the natural produce of the country, but the progeny of some tame horses that have run away from their owners. They perfectly resemble the horses of Little Russia, except, that their heads are thicker, the ears more pointed, and the nose short, upstanding manes, and short tails. The most common colour is a fallow brown; though there are some grey, and some of a deep brown, but no pie-bald or black. They go about in herds from five to twenty, consisting of mares, colts, and one stallion. When the stallion-colts grow big, the old horse drives them from the herd, and they are seen to follow the herd at a distance, till they are old and strong enough to become the sire of a herd themselves. They are said to scent a man at the distance of near a mile, if the wind sets in their favour, and will fly from their pursuer; but, in summer-time, when they are tormented by the flies, they are easily caught. They catch wild stallions by leading out a
mare,

mare, which entices them within shot. In the fort where I was, they had a wild colt, but he being too fierce to be broke in, they got rid of him. He seemed to me to have uncommon strength.

There were formerly in this district, a great many beavers, otters, and wild-boars ; but they have been extirpated by the Cossacks, who are great hunters. Badgers there are in plenty, bears and elks. Last spring, the country was over-run with antilopes, though this animal had not been seen here for many years before. The dryness of the season having brought them here in large herds or flocks, from the southern parts. They ventured even into the low grounds, and meadows. As this animal casts it's young in the beginning of May, we saw some young ones, and, like lambs, found they were scarce able to walk for some days after they were dropped. Some of these have been taken, brought up with milk, and rendered so tame, as to follow their owner about like a dog, answer to a name, and swim through waters after him. As they grow older, they will search for their food near the house where they have been fed, and if suffered to go at large, will not wander far from the village, but return at night. I could not have believed this, had I not been an eye-witness of the fact. These tame-bred antilopes, which resemble a she-goat, are not in the least afraid of dogs, nor will dogs molest them, any more than other domestic animals. Their flesh, if not
above

above one year old, would be preferable to that of the roe, if it did not smell so strong of wormwood, which is their favourite food ; yet this scent, when the meat is roasted and cold, goes off. The old ones are very disgusting, on account of their backs being covered with sores, arising from maggots, almost as thick as one's finger, deposited in their skin in an embryo state, by a peculiar species of fly ; (*Oestrus antilopum*,) so that there is scarce a spot to be found on their backs, which is not infected.

The mountains in this district are frequented by abundance of eagles and other birds of prey ; I saw here the yellow-headed, black eagle. The country people will often take the eagles from their nests, built on high trees, bring them up and sell them to the Kirguisians, at a very good price. Here is also a very rare bird, (*Pratincola* Cram.) which feeds upon grass-hoppers, and other insects. When they soar, they make a shrilling noise. Some have ridiculously thought this bird a species of swallow, but there is in reality no pretence for this. His bill is like that of the cuckow, he has a white stripe from the eye about the throat, and his flight and flying features, are like those of the sea-swallow, (*Sterna*,) but his feet like that of the curlew.

Here are many tumuli throughout this country, but not raised very high above the ground. Some Cossacks, who make it their business to open these graves,
assured

affured me, they found some uncommonly large human bones in them; for example, a shin-bone, that, set up against the leg of a full-grown person, reached higher than the knee. It is said, that a Kalmuck once out on a shooting party, found, laying in one of these tumuli, a transparent well-polished stone set in silver, which was sold by a third person, into whose hands it fell, for above 100 rubles, each ruble 4s. 6d. English. All the arrows, arms, and other instruments, found in these graves, are made of copper. Sometimes they find gold, and one of the Cossacks of Tozkaja, found upon a corpse a few years since, a golden neck-ring.

Sorotschinskaja, is, of all the forts erected on the Samarian line or boundary, the most considerable and best inhabited. It has a ditch, and a breast-work with chevaux-de-frize in a regular form, with some wooden towers. Besides many good houses belonging to the Cossacks, the commanding officer has a hotel, and here is also a court-house. The commander-in-chief of the whole Samarian line, dwelt here formerly. These last two buildings, and a wooden church, stand in the square and open part of the fort, and here is a good bridge built over the Samara. The river is very inconsiderable, and is so shallow and serpentine, that it is scarcely conceivable how barges could come up to this fortress from Orenburg; and that they did is incontestible, from the many anchors found here.

In my way on, at one of the redoubts, I was told, I had passed a tumulus recently opened, on which there stood erected a stone, having the face of a man cut on it, and another lying, with the shape of a man engraved on it. This intelligence excited my curiosity, and made me desirous of examining further into it. I therefore procured a number of workmen with proper tools, and went to this place, at the distance of 19 miles, on the 20th of June.

The opened tumulus on which the stones had lain, is one of the most considerable ones in the whole district; is near the river Samara, and just opposite the highest of all the mountains seen on the opposite side of the water. They had dug to the depth of ten feet and a half, which was the exact height the hill was raised from the ground; and it is said, they found in it some valuable things. I found myself, in the ground that was thrown up, a little piece of polished and carved mother-of-pearl, which seemed not the least decayed, and I found also, a great many human and marmot bones. Within the cave was laid a large flat, rock-stone, which probably had covered the body. The stone which I was told lay on the surface, and on which was engraved or cut, the complete figure of a man, was broken into small pieces, and from what I could see of it, appeared to be of a very soft, sandy nature, of which, a great variety is dug from an adjacent mountain; but the other stone, which stood at the
east

east end upright, is a hard and nearly triangular flat piece of rock, about four spans and a half in height, and it's upper angle apparently bearing some rough touches of a chizel, shaping out the face of a man.

In these tumuli are found bad iron-work, points of arrows, and steels to strike fire with, and in some, heads of horses. They told me, that the largest tumuli contain no valuable articles, such things being only found in the smaller ones. The reason perhaps is, that the smaller tumuli were the graves of women, to whom some ornaments were sacrificed; whereas, the higher tumuli seem either to have belonged to the Tartars of Nagaja, or to the Kirguisians, as their present tombs much resemble these. But those that are lined with brick, as many are, probably belonged to some older nation.

About thirty-six miles short of Orenburg, is the fortress Talitschewa, situated on a considerable height, where the river Kamysch Samara falls into the Jaik. It is a regular square, walled with timber, with chevaux-de-frize and wooden batteries, and a double church, one for the summer, and a smaller one, with fire-places, for the winter, garrisoned by a party of dragoons, and settled by Cossacks. Here are good houses belonging to the officers, and about 200 wooden dwellings; consequently, next to Orenburg, this may be considered as one of the greatest and most populous places

places of the Jaikian line. Here reside also the officers of the troops quartered in other forts, and the commanders-in-chief of the district. I saw the troops exercised, and was present at some of their amusements, in company with the commanding officer. The Kalmucks entertained us first with a concert, in their own way; a tolerable, good voice sung various Kalmuc love-songs, consisting of distorted and mournful tones and dissonances. Two others accompanied the voice, one with a Turkish rebeck with four strings, the other with a remarkable kind of flute, made of the dry and hollow stalk of the American sun-flower, (*Umbellata*,) covered with a gut. It had three holes at the small end, which were stopped occasionally, with three fingers of one hand; whilst the other hand, according to the tune, stopped the bottom of the flute or pipe. The upper-end or orifice, without any mouth-piece, is applied to the upper teeth, and closed between the upper lip and the tongue. It requires an extraordinary exertion of the voice, to produce sounds upon such a pipe; but, in the hands of a good player it resembles a fife. The Kalmucks call it *Zurr*, the Tartars *Kurab*, and the Cossacks of Jaik, who also make use of it, give it the name of *Tschibuisga*. The rebeck is called *Biwa* by the Kalmucks, and has no other bottom than a hollow, wooden cylinder, over which is stretched a dried bladder, as parchment over a drum. On this a bridge is fixed, and over this four lengths of cat-gut are strained on a long handle.

It is played with a bow, on which two rows of horse-hair are strained. These pass through the strings in such a manner, as to sound two in unison, at the same draw of the bow. Besides the above instruments, the Kalmucks have a two-stringed base-viol, a harp like a dulcimer, and a large jews-harp, which make up their base.

Next, several couples of young lads gave us a specimen of their art in wrestling. When at this sport, they tuck up their under-robcs round their waist, and strive to throw each other down, and are very clever at this exercise. They then shot at a mark with arrows, and next into the air; and concluded their diversions with a game at chess, wherein they followed all the customary rules, except advancing at the beginning with three men, instead of one.

The Baskirs could amuse us only with arrow-shooting and Tartarian dances. But what was remarkable, a man hoary with age, and having only two teeth in his mouth, played very masterly on the above-mentioned flute, and was even so expert as to play two tunes at once. The songs of the Tartars, compared with Kalmuck melody, were as the Italian music is to the French, and expressed generally something warlike and manly. The Tartarian dances consist in a transposition of the feet, and some very voluptuous attitudes

tudes and motions of the body and limbs, accompanied with hissing and clapping of hands.

Here I met with a plant which I never saw any description of, nor ever met with, any where else. The *Prenanthes hispida*. The pheasant is a bird not uncommon here, and it's feathers are worn as an ornament in the cap.

June 30. On the 30th of June, I pursued my journey to Orenburg, and was obliged to be escorted by relieves of Cossacks, or some other light troops, from post to post, to be safe against the Kirguisian plunderers, and it was at this season the more necessary, because, for want of sufficient pasture at home, they had brought their cattle to pasture here, and had taken up their quarters in this district.

On the first of July, I had about twelve miles to travel to Orenburg, and set out for that place in the morning. The description of this beautiful city and it's environs, and also of it's public buildings, has been so amply and ably set forth already, that was I to say any thing of it, I should only be a copyist. I will, however, venture to say from myself, that the situation of this place is very advantageous for Asiatic commerce. They endeavour to make it the centre of it, and it is perfectly adapted to that end, and to be the residence of wealthy merchants, and the establishment

of such manufactures, as the eastern nations are most in want of. Was such a plan set on foot, Orenburg would incontestibly become one of the most flourishing and important provincial cities, of the whole Russian Empire. Yet the profitable trade of this place is chiefly carried on by adventurers from the most distant parts of the empire, who, after having bartered their goods or sold them, return with their gain to their respective countries. These people come annually in great caravans, bringing with them foreign goods of all kinds, which this place itself and it's environs would produce, if manufactories were erected, and properly conducted.

The trade of this city consists now in the sale of all sorts of woollen cloths, especially red and scarlet, velvet, blue and white linens, hides, copper and iron kettles, chiefly brought here from the most distant manufactories of Siberia ; all sorts of ornaments for dress of tin and iron, needles, thimbles, glass and coral beads, and other little matters requisite for cloathing, and for the harness of horses. Also all materials for dying, such as indigo, woad, cochineal, allum, vitriol, likewise sugar, and some kinds of furs, particularly beaver and otter fur. Besides these things, the Kirguisians purchase of the Russian merchants a great deal of cotton stuffs, and barter it to the Bucharians for furs ; of course, the cotton-manufactories of this country are very profitable, and bring in a large revenue

nue to the empire, though the Russians purchase the materials of which the cotton is made, of the Bucharians and the people of Chiwinza. I am well assured, that there are many districts in the southern parts of Russia, where the cotton-plant thrives well, and it might therefore be an inland production. It has not indeed thriven in the districts of Orenburg and the Sakmara; the Tartars having made an unsuccessful trial of it. But this is owing to the great change from heat to cold, occasioned by the adjacent mountains, to the poorness of the soil, and the dryness of the land. Were such attempts made on the rivers Samara, Motfcha, Irgis, and some of the lower districts of the Wolga, they would be attended with success.

The principal articles which the Asiatic merchants, who come here in caravans, barter for the above-mentioned goods, are gold and silver, chiefly in Persian coin and Rupees, gold-dust, some lapis-lazuli, rubies and other precious stones; also a great deal of raw and spun cotton, a kind of finer Indian callico, than what is general, ready-made gowns of various goodness; black and grey, fine, Bucharian lamb-skins, which are sold at a great price, two kinds of wild cat-skins, spotted like a tyger's, tygers skins, &c. Sometimes the Bucharians will bring lumps of saltpetre, which is found in masses in such parts of their country as were the site of old towns and burial-places. Their commerce now, in raw silk, is very low, and all kind of finer Indian mer-

chandize is brought but sparingly, either because there are not sufficient buyers among the Russian merchants, or because the Bucharrians, as they themselves acknowledge, could not get such a price for them as would be adequate to the expence of bringing them. It is also to be considered, that the northern part of India does not produce such rich articles as are manufactured in the warmer climes which lie near the Indian ocean; so that were the Bucharrians ever so willing to bring them, they could not expect to rival the sea-trade in such kind of merchandize.

But, among the Bucharrian trafic, I must not omit to mention such articles as relate to natural history.— They bring then several fruits of their own country, as dried, wild apricots and peaches, a kind of small currants, which have either a very large kernel or none at all; nuts of the species of the beech-tree; worm-feed, which they say they get from India, and which, if thrown into canals in gardens and plantations, will destroy particular worms and catipillars. They bring also feed of melons, water-melons and wild Bucharrian barley. (*Holcus Saccharatus*).

There is no branch of the Bucharrian trade more important, or any that would turn out more advantageous to the state, by encreasing the Russian manufactories, than the importation of raw-goods; among which, the silk-trade has been but little encouraged. Camel's
hair

hair would be another rich article of commerce, as it might not only be manufactured at home, but be exported : and it can be purchased of the Kalmucks and Kirguisians, at the cheap rate from two shillings English to eleven shillings, for 36 pounds weight.

Bartering with the Kirguisians for cattle, is also a lucrative branch of commerce. Scarce a year passes but they sell to the number of from 40, to 60,000 sheep, and about 10,000 horses. The latter are conveyed into Russia ; but the sheep are mostly killed in and about Orenburg, and the towns situated on the Wolga. The fat is transported to the sea-ports of the empire, where it is sold for very little money, under the denomination of Russian tallow. Mutton therefore is to be had at Orenburg, in the summer-time, for little or nothing, as the dealers are contented with the gain they get from the fat of the tail only of a Kirguisian sheep, which weighs sometimes about 36 pounds, and after being melted down, will yield thirty pounds and upwards of tallow.

Besides this great quantity of large and small cattle, the Kirguisians bring to market a great number of common furs, wolves-skins, foxes, wild-cat skins, and many flunk lamb-skins. The Kirguisians also sell great variety of felt-covers and carpets, which they make of sheeps-wool, elegant and of various colours. As these people are but little skilled in commerce, they truck

them away for Russian commodities of small value, though they are now daily improving in cunning and prudence.

There is brought to market at Orenburg, the gold eagle, (*Falco Chryfatus*,) of which the Kirguisians are very fond, purchasing them for hunting of wolves, foxes, and antelopes. There is a certain token in the motion of this bird, by which they judge of it's goodness and docility, for they are not all adapted to the chase. A Kirguisian will sometimes give an excellent horse for one of these birds; when for another, he would not give even a sheep-skin, which among them is one of their smallest coins. To judge then of a gold eagle, they will often sit a great while looking at it. I must also mention, that the Kalmucks and Baschirs breed a great many camels, which they sell at Orenburg to the Bucharians, who commonly leave this city with much greater loads than they bring. The Bucharians bring their goods on the backs of little asses, and afterwards try to dispose of them, but the people here do not like them, nor has this animal or the mule, been ever bred in Russia.

July 3. On the 3d of July, I had the pleasure of going to, and inspecting the salt-works of Ilezkaja, 50 miles off, in company with his Excellency Major General Reinsdorff, the present governor of Orenburg, escorted with a strong guard of Cossacks, relieved
from

from post to post. To go to this place, we cross a bridge of boats, which connects the city of Orenburg, with the great and well-built market-place. All the heath from Orenburg, for a distance of 17 miles, had been wantonly fired by the Kirguisians, which is too often done in this wild country, and prevented me finding even a single root of that curious plant, which has been described by Dr. Rinder, and named from him.

These salt-works have a small fortress to defend them, garrisoned by Cossacks. The town is inhabited by thirty superintendants over an exiled people, by whom rock-salt is here dug, at the expence of the crown. There is one captain who presides over the works, and another who commands the fort.

About 280 feet south-east of this fort, rises a bare and white stucco mountain, in form of a sugar-loaf, full of clefts, and is called the watch-mountain, from having a guard of soldiers stationed on the top of it, commanding a view over a considerable part of the country. On the top is a cleft, which once was very deep, but is now partly filled up. The Kirguisians consider this mountain as divine, and used formerly to throw various furs and other trifles into the cleft, by way of vow or sacrifice. Even to this day, they come round the hill at certain times, in solemn procession, and say their prayers, kneeling; having first bathed and
cleaned

cleaned themselves in the adjacent pools. It is related, that before the pit or cleft was filled up, some covetous person in hopes of finding treasure, made a descent into it, and found the cold insupportable.

Between the watch-mountain and the fort, lies the salt-vein; it's greatest diameter is about 600 fathoms, (each fathom seven feet English,) and the cross diameter 550. To get at the rock-salt, they dig sometimes three or four fathoms deep, but in some places it lies so high, that we may touch the solid salt with a dagger, or a ram-rod. There are a great many fresh-water springs about this place, which seem to run all to this salt-rock, and in such quantities, as sometimes to interrupt the working it..

Salt-mines. The nature both of the salt, and the ground which covers it, may be best seen in that large and open mine, where they are digging at present, and have so done, for many years past. This mine, downwards from the watch-mountain, including all it's windings, is about 300 fathoms. The pit, or open part at top, is now above sixty fathoms long, and in some places, from nine to ten fathoms broad, and the salt has been dug out in places, to the depth of three fathoms; but, by the orders of General Reinsdorff, they are now going deeper. They had no method of lading out the water from this mine, but by pails, his excellency

lency has, however, had a depending part dug, and the water is from thence worked out by a machine.

The present method of digging the salt, is as follows: they first dig narrow cross-drains with pick-axes, to a certain depth, so as to leave a block of salt, about an ell broad, and an ell and a half to two fathoms long, between the channels, and this block is raised by levers, wedges, and breakers.

Over the pure and solid rock-salt, in it's whole extent, is nothing but a miry land, consisting of a coarse yellow quick-sand, lying in heaps, from two to three fathoms high. Near the bed of salt, the sand is penetrated with salt water, and if dried, becomes hard as stone. The vein of salt does not seem to lie horizontally, but to wave, being in some places deeper, in others shallower.

How deep these mines run, is not known with any certainty, they are working now only on the surface. The mountain-borer, which I directed to be applied, (but with great labour,) could not be worked down more than half an ell a day, into the solid rock. It has been pierced in autumn, to the depth of rather better than twenty ells, but it could be bored no farther, being stopped by a black, impenetrable stone. In a shaft, at some little distance from the great salt-pit, they met with a blackish marle, (at the depth of three fathoms,)

fathoms,) so solid, that it could not be removed with spades.

The salt is generally very pure, solid, and of a white colour, and breaks, when knocked to pieces, in little square lumps, like dice. It dissolves in water rather slower than sea-salt, but has been found not so strong to salt meat with. Some masses of about 36lb. weight, are here and there found as clear and transparent as chrystal, and capable of being worked into boxes, and other toys.

Here are a great many salt-pools near this spot, in which the Kirguisians occasionally bathe, for the cure of certain disorders. The water is so powerful, that a man who goes into it breast-high, is lifted up, and lies upon the surface like a plank. It is a common saying, that the water in these pits is at certain times, during the cold weather in autumn, cold on the surface, but near the bottom so warm, and sometimes so hot, as not to bear the hand in it, but I could find no difference in any I felt, which during cloudy and cool weather, was five degrees colder than the air. If this report be true, I should suppose, that the salt crust covering the bottom of the pool, attracts the sun's heat like a burning-glass, and thus renders the water near it hot. Admitting this to be the case, the reason why I could discover no difference was, that the
sun

fun had not shone, when I was there, for several days. I don't know of any reason more probable.

The most common plant growing here is, the salt-wort, (*Salicornia herbacea*,) which, being pickled with spice and vinegar, is a very palatable sauce. The plantain, (*Plantago Salsa*,) growing on this land, takes on a very pale red-colour, and is very salt to the taste. I should suppose, that from this and other salt-plants, the salt alkali, (*soda*) might be prepared: but, in a chemical process on the salt-wort, at Orenburg, it was found to contain too much culinary salt. Sixty or seventy pound weight of this plant dried, yielded twenty pounds of salt-ashes. I shall shew hereafter, that the Russians, prepare and export great quantities of alkali, but yet none from this plant.

The salt of Ilezkaja, is mostly dug in summer-time, the workmen are paid at the rate of half a copec, for 36lb. weight. There were now laying before the pit many ton weight of salt, ready to be conveyed away. Winter is the season of transporting it, which is done by the Baskirs and vagaband peasants, who have wandered from different provinces of the Empire, and are settled in the district of Orenburg. The price of transport from the mine to the salt-office, at the river Aschkader, is paid at the rate of six copecs or about 3*d*. English, per pud, (each pud 36lb. English.) Thence it is conveyed in barges on the rivers Belaja, Kama,

Kama, and Wolga. In this way did they transport throughout the Empire, in the course of the last year, above a million of puds, and the quantity conveyed away must have been considerably encreased, since that time, by the present, well-directed regulations ; two new salt-offices having been erected, one upon the river Ik, and the other on the Samara.

Before I leave this remarkable spot, I must mention, that notwithstanding the saltiness of the soil, in one of the gardens here, not only divers sorts of vegetables seemed to thrive well, but the tobacco plant, raised from Virginia seed, came on well, and had a fine smell ; which leaves not the least doubt, but that tobacco might be raised with great success, on the salt heaths, between the rivers Jaik and Wolga. It ought also to be noticed, that even in this salt district, as also upon the whole southern step or heath about the river Jaik, the garden tulip, (*Tulipa Gesneri*,) with yellow and red cups, is every where seen. They are rather smaller than our European ones, yet have been known to encrease in their size considerably, by removing them into good garden soil.

Before I quit Orenburg, I will take notice of a neighbouring copper-mine. Though I did not see it myself, I am able to describe it, from the accounts I received. This mine is not far from Orenburg, and formerly belonged to Count Alexander Schuwalof, who
has

has since sold it, with some other lands, &c. It has not for eight years been worked, any thing worth mentioning. To protect the workmen from the Kirguisians, on one of whose heaths it stands, the place is defended by an intrenchment, and guarded by some ordnance, and a company of soldiers. This discovery was made some years back, in the old shafts, scattered about the mountain. Upon all the Uralian mountains are many such old shafts or pits seen, which have been undoubtedly made in former times by some industrious miners, but unknown to us. The most considerable mines in the district of Orenburg, owe their discovery to old vestiges of these miners, which consist of round pits, and deep subterraneous passages, some of them so narrow, that they must have had much trouble to work in them. In many, they could not stand upright. Near Saigatschi Rudnik several pits have been found and a stream-work uncommonly spacious and in very good state. On clearing it out, they discovered some cakes of melted copper and some round pots of white clay, in which they melted the ore, also some bones of workmen, on whom the ground had fallen in, but not the least traces of a hearth or furnace. In some of these old spots they have found a beautiful green and clear copperas.

The stone in which the ore lies, in a very compact green mass, is yellow, soft, coarse and sandy, and above the ore, lie broken layers of soft, red marble, but the
most

most curious circumstance is that near the ore in the sand-stone, is almost every where small and large pieces of trunks of trees, petrified into a kind of rock, that rings when struck with a steel, and gives fire like a flint. Some of these petrifications are brown and seem to be pieces of linden and other trees, and encrusted with verdigrease and blue vitriol.

However rare such wood-petrifications are in other districts, yet the ores dug in the southern districts of the Uralian mountains abound with them. All the mines along the middle part of the river Jaik both on the Russian and Kirguisian side; and those near the rivulets and brooks that flow into the Samara, are more or less crowded with such petrified pieces of wood, and sooty pieces of sprays, resembling charcoal. They often find huge trunks, with some of their roots and branches. In the winter 1768, I sent from Orenburg, to the museum of natural history, at Petersburgh, a piece of root, which had lain several years in this city, and was larger than could be compassed by the arms; it belonged to a trunk near seventy feet long. It's back was changed into a rich, copper ore, having been found in the mine above-mentioned, with another laying across it, underneath a layer of black ground.

Along the line of the Jaik are wooden redoubts, erected at certain distances, and in the midway between each is a guard station and a pyramid erected on some high

high ground, with wreaths of pitched cords and other inflammable materials, wound round them, which are occasionally set fire to, as a signal to the adjacent guard-station, when the plundering and rapacious Kirguisians have made any incursion or committed any depredation.

We here met with a Chiwian caravan, consisting of thirty camels, which, for want of food in this parched country, were scarce able to walk. Those used by the Asiatic caravans are mostly two bunched camels, or dromedaries. Those with one bunch on their back, are seldom used for this purpose. They pass a cord through the bridge of their noses, and, during their march, tie one to the tail of another, the goods hanging in large bales on both sides on wooden pack-saddles. Each load is wrapt in a coarse, cotton stuff, tied with cotton strings, and to shelter it from the weather, is covered with felts tied on with hair-ropes. For riding and the carriage of provisions, they use asses, not unlike European ones.

On one of these mountains, in this district, is dug talc in sheets, which are fit for window lights, but it is never found in pieces above a yard square; and as it is not genuine ising-glass or talc, but only a gypseous spathum, which does not split pure and fine, is destitute of the other properties of genuine talc, it does not deserve much attention. This mountain was surveyed in

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1757, by a land-surveyor, sent from the mine-office, at Orenburg, who has fixed it's distance at about four miles from the fortress Sheltoi, erected upon the Samara.

The brooks in the vicinage of these mountains swell so much in spring, from the abundance of snow-water, that one sees whole trees drawn up by the roots and lying about in them. On some of these mountains is found a great deal of jasper, some of a pale-green colour and some flaming red. On one, the fortress Orskaja is erected, about half a mile from the mouth of the river Or. In it's centre, stands a pretty stone-built church, which may be seen on all sides from far. Near it stands the uncommonly well-situated observatory, erected by Lieutenant *Euler*, to observe the transit of Venus over the Sun; round about the hill are dwelling-houses, but none tolerable, except that of the commanding-officer, who is a lieutenant-general. The Asiatic caravans, which go to Orenburg, cross the river Jaik at this part of the Russian-boundary. Here their goods are sealed up, and they can sell only as much as will enable them to hire waggons to carry their merchandize on, in case they should knock up their camels.

The mountain on which this fort stands consists entirely of Jasper. The stone on the surface is rough and rocky, but the deeper, the more fine and beautiful is the colour, a very pleasing, pale sea-green and a deep brown-

brown-red. Some is white, some grey, and a great deal of it is black with flame-coloured veins and spots. It has been often dug into by miners sent from the Petersburg manufactory at Catherineburgh, and I am persuaded, was it properly done by regular shafts, it would produce beautiful plates of jasper. By examining into the nature and mixture of these jaspers, it cannot be doubted, but that they were formerly a soft, varied-coloured loam, now petrified. On the uppermost parts of this mountain is nothing to be seen but a milk-white quartz, scarcely covered with earth. On the summit of all the mountains, in this chain along the Jaik, are Kirguisian tumuli, consisting of the best jasper. Great pains have been taken to select such a heap of jasper-stone as form these graves, which rise considerably from the ground.

July 13. I visited this chain of mountains about the middle of July. The valleys have a saltish soil, and lead one to suppose, that the salts which are derived from the burning of the heath and the urine of the cattle, afterwards washed down into the vales by the rain and snow, are additional causes of the many salt spots found in the southern steps; though it is past a doubt that the strongest of them originate from some hidden and subterraneous sources, for there is no district in the known world that can boast of such an abundance of mineral salt, as the southern parts of Russia, Siberia, and the vast extent of Tartary.

The line of forts all along the river Jaik, were erected to defend the interior provinces of Russia from the incursions of the Kirgese. These forts are seldom garrisoned with more than a company of soldiers from twenty to thirty in number. For though the Kirguisians are very fond of plunder, they do not like the Arabs make their inroads in large bodies, but in small gangs, and shew but little courage.

Jaizkoi Kasatschei Gorodok, July, 25. In tracing the river Jaik I reached Jaizkoi Gorodok, the chief city of the Jaikian Cossacks, on the 25th of July. This place is situated (according to the observations made by Lieutenant *Euler*, in my presence) in north latitude 51 deg. 10 min. 46 sec. at the banks between which once flowed the Jaik, whose course is now more eastern and straight. The district about the city is elevated and tolerably even. The city is very irregularly built in form of a crescent; in one part it is encompassed with a breast-work, supported with chevaux-de-frize and a ditch, and is furnished with some pieces of ordnance, but is open to the river Jaik, being on that side safe enough. The number of wooden dwelling-houses, which are chiefly built according to the old Russian fashion, but large and spacious, amounts to about 3000. They are in general divided into narrow streets, and built very close together. The principal street, which crosses the whole city, from the side towards Orenburg to the river Tschagan, is very crooked and irregular, but it is
wide

wide and ornamented with the best houses, Near this street stands a good stone-built church and the market, where there are all sorts of provisions and many other things. Farther on, towards the well-built cathedral, are a great many shops, under the houses, where foreign merchants sell a great deal of good merchandize very cheap: a little beyond this, are the suburbs, where the Cossacks of this nation live together, and have a *Mesched*, or house of prayer, built with wood and painted white. There is also a third church built with wood, in this principal street, besides which, there are two chapels built with the same materials, but with few ornaments; and which are very seldom attended by the Cossacks, who call themselves the *Old Faithful*, and perform their devotions chiefly in their own houses; so that even on the most solemn festivals, they scarce do more than assemble round the church, during the time of service, or sit and kneel on the outside of the building. It is ascribed to this prejudice, that a church which had been burnt down and they had began to rebuild with wood, more than twenty years back, remains at this day unfinished.

The city, in general, is very populous. Besides the great number of foreign merchants, who reside there at all times, and a still greater number of hired people and workmen, who get their living there, it is calculated that the Cossacks alone amount to above 50,000, among which are reckoned 4800 enlisted soldiers, be-

longing partly to the army, and partly to the garrisons of the line. In this number, are a great many Mahomedan Tartars, unconverted Kalmucks, and therefore called *Kysilbasbes*, partly of Truckmenian, partly of Persian extraction, and generally well-skilled in the cultivation of melon-grounds. Those who have turned christians, are called *Baldyri*. There are also among the latter many Kalmucks, who have embraced the christian religion, that they might not be delivered up to the hordes, from which they have deserted.

The Jaikian Cossacks having settled in an entirely wild country, there is no determining the exact boundary of their district. On the left shore of the Jaik, which is inhabited by the Kirguisians, they dare not lay claim to any thing but the hay that grows in the meadows on the western side. They call all the heaths or steps their own, from their city towards the Caspian sea, as far as the river can be seen ; and their neighbours on that side, *viz.* the Ordinzian Kalmucks, contest not the matter with them. The greatest claim they maintain is, to the river itself and it's fisheries, of which they are fully masters.

The chief of the Jaikian Cossacks is a person, called by them *Woiskowoi Ataman*, now residing in Jaizkoi-Gorodok, who is established by, and is subordinate to, the council of war belonging to the empire ; but his rank is not fixed. He has under him twenty elders, or *Starchins*, the principal of whom are always sitting as judges

judges in the court-house. This council has a recorder, a secretary, an interpreter, a few clerks, and other officers. The chief, or ataman, has two adjutants; the lower ranks of officers are fotniks and deffatniks, and no one can arrive at the honour of being an elder or starchin, till he has served in the city as a deffatnik, fotnik, and adjutant; for those that serve in the forts, on the line under these titles, are inferior, in point of rank, to the former. Every officer belonging to this regency has a proper income, and several privileges from the crown, but those who are not converted to the christian faith, can never rise to any dignity higher than a fotnik.

The power of this regency is very much circumscribed, for the constitution of the Jaikians is merely democratical. No public matter can be decided but in a general assembly of the people, which they call *Krug*, (circle.) If any thing is to be done that requires a *krug*, or if the people are to receive any high, imperial commands, the bell rings, which calls them together. The usual time is between ten and eleven in the forenoon, but the assembly may be convened at any other time. At which time, all the Cossacks in the city are drawn up round the court-house, which is built with stone, and stands, near the cathedral, in a square, encompassed with iron rails, round which the people stand, but without any particular order. When the assembly is sufficiently numerous,
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and the chief or ataman, (who is already with his elders within the court-house,) is made acquainted with it by his adjutants, he goes out on the covered steps before the court-house, (having in his hand a staff, with a silver head, gilt,) accompanied by the elders. The two adjutants then enter the square, lay their caps and staves on the ground, and after having said the usual prayers, bow first to the chiefs, next to the elders, and then to the people every way, who return the salute. This done, they take up their caps and staves again, which are the ensigns of their order, approach the chief and lay their caps at his feet, bearing their staves in their hands. After having received from the chief the matter to be debated on, they go back to the people, and when the senior of the two hath called silence in a particular form, they both repeat the word *Pomolschite*, (silence,) and then tell the people aloud, the subject to be determined on. This done, they collect their suffrages or votes, and carry them to the chief, who makes his reply to the people through his adjutants, or informs them of the result of the poll. The common acclamation of the people when they consent, at one of these meetings, is *Soglasny wasche Wyfoko rodie*, that is, "We acquiesce, high-born gentlemen," but they declare their dissent, by *Ne Soglasny*, muttering and bringing up the liberties of their ancestors.

The commands of the supreme council, are announced to the people by their secretary, who places himself between the two adjutants, and reads them aloud, the people standing uncovered.

It is needless to mention any thing respecting the first settlement and events of the Jaikian Cossacks, it being most circumstantially related in the topography of Orenburg. I will, however, say something of their present state. Their manner and way of living is as free and unconstrained as their government. Young people are continually amusing themselves with a variety of sports, and the old are not a little addicted to drinking and to idleness. The female sex are at no loss to give themselves pleasure and delight, as much in intrigue as in dress. The latter no way differs from that worn by the Russians, except in the high colours of their shirts, and the form of their caps, which stand up straight in the front, are round and flat at top, and commonly very richly embroidered. That worn by the men is the common Cossack or Polish dress. There are among them some people of knowledge and good manners, and, about the river Jaik, we frequently meet with politeness and cleanliness, which arises from their intercourse with foreign merchants. They were formerly very uncivilized, and had some very cruel customs. A creditor was authorized to seize his debtor, tie a rope about his left arm, and lead him about publicly, or treat him as
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ill and contemptuously as he pleased, till his debt was paid, either by friends or by alms. But as the right arm is used among Popish Cossacks to make the sign of the cross, should the creditor tie his debtor's right arm by mistake, he incurred a punishment for so doing, and lost all claim to the debt. When a wife had given her husband offence, he was at liberty to dispose of her by sale, at any of their publick meetings, and the price paid was often but a trifle.

On all solemnities both of church and state, the people assemble about the court-house, and are treated with bread, fish and brandy,

Within the hall, the regalia being removed, the tables are spread with all sorts of strong liquors, dried fish, roe (or caviar) and bread, when the Sovereign's health is drank by the Ataman and Starchins, under the firing of the great guns, and the whole is concluded by drinking to the prosperity of government and the welfare of the community.

Young people enjoy a great deal of amusement. Their courtship and nuptials deserve to be noticed. From the very day of a solemn betrothing, which is done with many ridiculous circumstances, to the day of marriage, which is seldom sooner than twenty weeks, all the young maidens of the bride's acquaintance assemble every evening at her house, and divert themselves

selves with singing and dancing. During this time, the bridegroom is authorized to take a husband's liberties with his bride, but with some secrecy. Before the wedding, the bridegroom presents his bride with a complete female dress, and she, in return, presents him with a cap, boots, and shirt. When the nuptial ceremony is over, the bride returns to her house from the church in an open waggon (*telega*). Behind her, sit her mother and the bride-maid, their fingers full of rings and holding out on each side a piece of linen to hide the bride's face from the spectators. Before the waggon walks the bridegroom with his father and relations. Behind ride several, among whom is one carrying at the end of a long pole, like a flag, a piece of stuff, striped with several colours, such as is worn by the Circassian women, by way of petticoat; and it is strange that the women of this district do not wear it likewise. The nuptials are next celebrated with dancing and singing, and mostly in the streets. Tartarian dances are frequent at such festivals, and there are many young people who perform the varied and innumerable motions of the body with great strength and wonderful agility. Athletic exercises they practise from their childhood, as also shooting with the bow, the use of fire-arms, and the lance, in which they are eminently skilled.

I have already said, that the line or boundary along the river Jaik, besides the little forts and stations, are chiefly

chiefly garrisoned by Cossacks; for this purpose they enlist every year, about twelfth-tide, a thousand volunteers to relieve those posted there the year preceding. Many of these foldiers settle afterwards in or near these fortresses, continue in the service and breed cattle, acting as substitutes for others, and receive their pay, preferring this life to the laborious and uncertain trade of fishing. At every new levy, the volunteers are accepted at a public meeting, and their pay is there settled, according to each man's respective circumstances, generally as little as possible. For these troops they elect a certain number of officers, and the colonel is subordinate to the Ataman.

I will proceed now to their several employs and the manner in which the Jaikian Cossacks get their living. They have among themselves, shoe-makers, smiths, carpenters, &c. and never suffer strangers of these denominations to settle among them. Their town is supplied with such articles as are not made here, by foreign traders, who travel to this place to purchase fish. Some of the Cossack women make camblets of different goodness and value; the most common sort is very durable and cheap, and they manufacture some of so superfine a quality, as not only to rival the camblets of Brussels, but would excell them, was it not for the defect common to all their drapery and stuff, that of being made in very small and narrow pieces. The Tartarian name of these stuffs is *Armak*, and seems to have been invented by
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the Kirguisians or Kirgese, whose women manufacture a coarse kind of camblet. As camel-hair is to be bought here in great perfection, and at so low a price as about 9s. English for 36 pounds weight, it is a pity that encouragement is not given them to manufacture a stuff of this hair in large pieces, which would find purchasers every where. They, at present, breed very few camels, not selling any great number to the Asiatic caravans; but there is no animal that would thrive better on, or are more fond of, the salt plants that overspread the heaths of this district.

Breeding of cattle is one of the principal occupations of the Cossacks; but the Russians attend only to horses, and to horned cattle. Both prosper well in this warm country, and acquire a handsome form. Their horses are no way inferior to Russian horses, in beauty, strength and courage. They live both summer and winter on the heaths, and never fare better, till when taken up to hard labour. The dry ground gives them a fine, hard hoof, and renders shoeing unnecessary.

On account of their breeding of cattle, many of the Cossacks have enclosures or cattle-yards, on those parts of the heaths, where there is the best pasture. Such Tartars, as keep great flocks of sheep, wander about with tents, made of felts, but the Russians erect wicker huts, where they gather their sheep at night,

night, and plaister these huts with mud. They drive great herds of cattle from the Jaik to the Wolga, and transport great quantities of hides and tallow to those towns, where there are a number of tanneries, and soap-manufactories, as Casan, Jaroslaw, Arfamas, &c.

Another branch of employ is hunting heath or step-foxes, wolves, beavers, and wild boars, of which sport they are very fond. The season for this, is the first three winter-months, when they are tracked in the snow. And they follow this business close up, especially when they have had an unsuccessful fishery.

But the chief employment of the Cossacks about the river Jaik is fishing, wherein they are regulated by many customary laws. They fish but four times a year in that river, and only three of these seasons they consider of any importance. The first principal time is in January, when they fish with hooks; the second is in May, and continues till June; the third, and least considerable, is the autumnal season, in October, and they finish in the beginning of December, with nets; which they set under the ice, not in the Jaik itself, but in it's branches, and the lakes upon the heaths. At this lake fishing-time, they catch only a few small fish for their own use.

The crown, in laying a moderate duty on the fish-garth or wear, formerly made upon the river near Gur-jef,

jes, had confined the fisheries to the Jaikian Cossacks; but, they having demolished that garth and erected another at the further end of their city, which stops the passage of the whole river, the fish from the Caspian sea can come no higher up than Jaizkoi Gorodok.

I will now proceed to give my readers some account of these fisheries. The kinds of fish caught in this river, are the horn-fish, sturgeon, shad, barbel, bream, salmon, and a variety of small fish.

Of all the wandering fish, the first that comes up the river is the white salmon, and that in February. They are caught beneath the ice by hooks, baited with pieces of fish. In March, April and May, the several kinds of sturgeon shoot their way from the sea, and swim up the Jaik, in shoals. I have been well informed, that at certain seasons, they place cannon on the banks of the river near the wear, at Jaizkoi Gorodok, load them with powder only, and fire often into the water to repel the impetuosity of those vast shoals of large fish, that would otherwise break the wear, that crosses the river. They say, and it is very probable, that the sturgeon comes up into the river in the month of April, when the willow buds, to spawn, and that they rub themselves upon the stony ground to get rid of their roe; though, as I have observed before, young sturgeons are never caught. From a conviction that
the

the Russia sturgeon and horn-fish, pass the winter in this river, they have a law that obliges them to throw all they catch, into the water again, because, when recaptured in winter, and transported in a frozen state, they fetch a greater price, and thus contribute to the public interest. And they enforce this law so strictly, as constantly to deprive him that breaks it, of all his fish-provision, and whip him into the bargain.

It is chiefly sturgeons and bjelugas that are caught with hooks, in January. These fishes are said to lay themselves in rows, in deep parts of the river, towards the latter end of autumn, and so pass the winter in a certain state of rest, though not without motion or sensibility. Now, as the river Jaik, from its sandy bed, is continually changing its depth, owing to the inundations in spring, that wash away the banks beneath the water, it is uncertain in what spots the fish lie. On this account, in autumn, when the ice begins to form itself, the Cossacks will watch the motions of these fishes; for it is said, that before they lay themselves up, they play some time upon the surface of the water, and leap several times over those spots where they mean to winter. Others go out upon the ice, as soon as the river is frozen, and lay down on those spots where the water is clearest, and will tell you, that by putting a cloth over their heads, they can see the fish lying at the bottom.

When

When the time of the hook-fishing is come, which is commonly on the third or fourth of January, a general assembly of the people is held, when it is asked about, whether the absent Cossacks are returned; an enquiry, also, is made in what places the fish is supposed to lie, and finally, what day is fixed to begin fishing. In this and other fisheries, with an intent to keep order, they elect an ataman or chief, from the starchins, under whose command they choose some elders and an adjutant, as conductors of the rest: but the inferior Cossacks join as it were in partnership, five or six together. Every thing is prepared before the day fixed, and care is taken to have good sharp hooks and poles of various lengths on which the hooks are fastened. Before the fishing day arrives, every Cossack enlisted, though not on duty on the lines, receives a written licence, sealed with the regency-seal. A Cossack that has served his year, or one that has not yet served, may procure a licence to fish, by getting himself registered. No person can have more than one of these written licences, except the members of the regency, who have some exclusive privileges. The ataman, or chief, is entitled to four, the starchin to three, and the inferior officers to two licences each. The clerks have only one licence granted to two, and every resident priest has one. Those who have these licences can sell them, which enables many, who have no claim to a licence, to purchase one.

On the day appointed, all those Cossacks who have written powers, assemble themselves with sledges, and every necessary implement before sun-rise, in a certain place, before the town, and range themselves into a line, in the same order in which they reach the ground. Here they are received by the ataman, elected for the fishery, and care is taken, that every Cossack has a firelock, in order to defend themselves against any attack made on them by the Kirguisians. This done, two officers exhort the people to behave orderly and quietly, and as soon as day begins, a signal is given from the town, by the firing of two pieces of cannon; upon which, every one hastens, as quick as his horse can carry him, to the district appointed for the fishery, in order to choose the most advantageous spot. Yet no one dares begin to open the ice, till every one has taken his place, and the ataman has fired a gun or two, by way of signal to begin.

I must notice here, that the river is divided into two parts, one for the spring and autumn-fishing, and the other for the hook-fishing, alone. The latter begins just beyond the town, and continues to the distance of 300 miles; and from thence to the Caspian sea, the river remains undisturbed, till the net-fishing comes on. At first setting off, they fish only one day, to enable the poorer Cossacks to purchase with the gain of that day, provisions, and other necessary things. Five or six days after, the great fishery begins, and
lasts

lasts for nine days, fishing about twenty miles of the river each day. Each day the Cossacks hasten to the spot, where they are to begin, before dawn, and there wait for the signal of the ataman.

Every man makes, on the spot where he means to fish, a moderately round opening in the ice. One may fish as near another as he pleases, but no one can have two openings, at a time; yet, when he leaves one opening he may make another, and a second may occupy the spot he left. By frequent changings and trials, they will fish in the course of the day the whole district, appointed for that day's fishery. Where the places are not very deep, they use hooks, with short poles. The pole, with the hook on it, is put down to the bottom of the river, and as the disturbed fish rise, they draw up the pole, and hook the fish. This done, they bring it within reach of a short hook, which they have in their other hand, and with which they hook the fish afresh, and pull it up upon the ice. If two men hook the same fish, it is divided between them, and if one has not strength enough to pull a fish out, he calls his next neighbour to assist, and the fish is divided. One man shall have sometimes the good-luck to hook ten or twelve large fishes in a day, when another shall not be able to catch an equal number in the whole month, perhaps not sufficient to pay his expences. A man commonly makes a vow before he leaves the town, to give the first fish he hooks, or perhaps more, to the

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church,

church, on condition fortune favours him. And they are superstitious enough to believe, that in case they hook a frog, (of which there are some of very enormous size in this river); the person to whom this disaster happens, if he ever changes his spot or hooks, will not catch a fish the whole winter.

The second great fishery is in the spring, for the fish Sewrjug. As soon, in the month of May, as accounts arrive from Gurjef, sent by the Cossacks quartered there, to watch for the said fish, that it makes its appearance in the mouth of the river Jaik, they prepare every thing to catch it. The same orders and ceremonies are observed, as in the winter. An ataman is chosen, whom every one, who has a written power, is bound to obey. A certain district is set out for the fishing, by a rope drawn across the river, which no one is to pass. This fishery lasts only three days, as the sewrjugs, when disturbed, return into the sea. The last fishery is commonly finished in one day. This is carried on at the mouth of the river, and begins with the usual ceremonies, as before, at day-break, each endeavouring at a signal given, to out-row the other, before the nets are spread, for every one who fishes, has a boat and net to himself. These boats are made of the trunks of black and white poplar, (no other tree here being of sufficient diameter, for the purpose,) tanned on the outside with the asphaltos, which I have already mentioned, and which is found here in abundance.

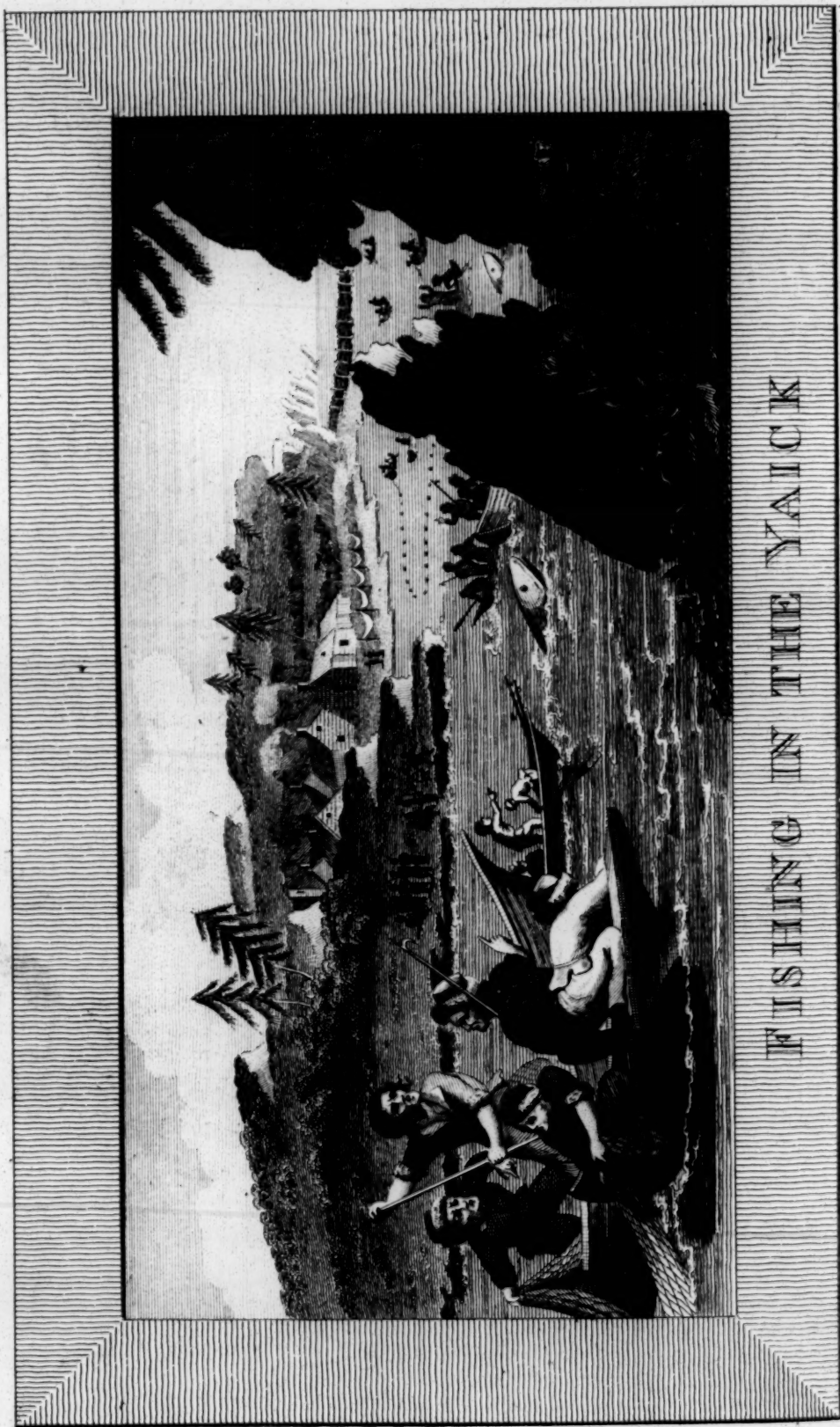
ance. The nets they use, for Bjeluga fishing, are from 20 to 30 fathoms long, each fathom, seven feet English.

‘ To observe the struggle,’ says Mr. *Gmelin*, ‘ there is in the Bjeluga fisheries, is pleasant. When the cold sets in, the fish retire to their lurking places for the winter, at which time, as the bjeluga holes are well known, the commander of the fishery, orders all the inspectors to forbid the fishermen from exercising their profession in such places as these fish lie, and all masters of vessels on the river, not to make any noise, nor fire any gun to disturb them.’

‘ On the day when the great fish-chace is settled, after the fish have been seen to rise several times to the surface of the water, and then plunge to the bottom, which is generally about the beginning of November, the fishermen are appointed to attend at a certain hour, with their boats and implements; and the commander, inviting his friends to the diversion, the evening before, repairs with them to one of these hurdle-dams or fences, across an arm of the river, for at each of these dams a number of labourers are kept at a regular fixed salary, have houses to live in, and a church for public worship. The company continue here all night regaling themselves, and at break of day, proceed to the bjeluga-holes, with a universal silence.’

‘ Having prepared their nets, and disposed their
‘ boats in proper order, the firing of a musket is the
‘ signal for departure. At this signal, all the boats, to
‘ the number of 300, start at once ; and no sooner are
‘ the nets cast, and all the passages closed, then the
‘ most horrid cries and shouts of the fishermen, suc-
‘ ceed the profound silence that reigned before. The
‘ affrighted fish endeavour to escape by all sorts of
‘ means, some gain the surface of the water, others
‘ not daring to venture so high, remain in the middle
‘ region ; some strive to shun the danger by the most
‘ irregular contorsions, but none can escape, being
‘ encompassed by a troop of fishermen and nets. The
‘ sport now encreases, enormous fish are seen tumbling,
‘ head over tail, on the surface of the river, and others
‘ oversetting the boats. In one place fishermen, wet
‘ from head to foot, making an uproar as if they were
‘ possessed, and indeed they are so, most of them be-
‘ ing drunk ; in another place, loud and violent dis-
‘ putes and torrents of abuse take place, on the
‘ driving together of two boats, When fortune is
‘ more favourable to one than another, we see the ef-
‘ fects of jealousy ; at last, all order seems to be ba-
‘ nished, all persons row where they can, and hence
‘ arise a thousand fresh disputes, as the nets entangle,
‘ and the boats ride and drive upon each other.’

‘ The great sturgeons, (*Ichthyocollæ*,) which at some
‘ seasons are more than ten men can master, are at
this



FISHING IN THE YAICK

New engraving

Bowick del

Published and sold at the City of London by J. Bowick

' this time so feeble, that two fishermen can take one
 ' at ease, such an effect has the cold upon them. This
 ' fishing lasts commonly for two hours, and when over,
 ' the fishermen flock to the chief to deliver their fish,
 ' and receive their reward. This again breeds new
 ' subjects of jealousy and quarrel, fresh clamour, and
 ' fresh bawling. Every gang struggles, to get first,
 ' and they often fight; they beat and knock one ano-
 ' ther about; oars are broken, boats are split, and
 ' very often a part of the combatants are tumbled into
 ' the river, and perish. Mr. *Gmelin*, who was present
 ' at one of these fishing-parties, on the 3d of Novem-
 ' ber, 1769, declares, that there were taken in less
 ' than two hours, more than 500 bjelugas of different
 ' sizes, but the generality of them are, from thirteen,
 ' fourteen, to twenty-three hundred weight each. He
 ' adds, that there was not found in all that number,
 ' any more than one sewrjug, and one common stur-
 ' geon.'

It is affirmed by fishermen in general, that they
 sometimes meet with fish, hermaphrodites, as well among
 the bjelugas as other kinds of sturgeon; that is,
 fish that have a milt on one side, and spawn on the
 other. The same thing has been observed in Holland
 among the chevins, or large cod-fish.

' The river Wolga,' says *Tooke*, ' has a great re-
 ' semblance to the Nile in Egypt, for it receives into

‘ it’s channel so infinite a number of rivers and streams;
‘ that when these are encreased by the melting of the
‘ snows, the waters rise above their usual level, and not
‘ only overflow the low islands in the river, so as that ships
‘ pass over them, but all the plains that lie on each side
‘ the river are so overwhelmed, that nothing but the
‘ tops of the highest trees appear above the surface of
‘ the water; and when the water leaves these plains,
‘ the land is in the highest state of richness and fertility.
‘ But on account of it’s numerous windings, angles,
‘ flats, isles, shelves and sand-banks, the most experienced
‘ sailors are kept in continual alarm. It is only
‘ in the months of May and June that large vessels sail
‘ on it with security and ease, when the waters are swelled
‘ as I have mentioned. The widest part of this
‘ river is between Tzaritzin and Astrachan. At Astrachan
‘ it is 2200 feet over, at Tzaritzin about three-fourths
‘ of a mile, and it divides itself into a greater
‘ number of branches than any known river in the
‘ world. At Astrachan the river rises or swells about six
‘ feet, at Tzaritzin higher, and the flats and vallies
‘ all round are so entirely deluged that they have the
‘ appearance of a large ocean, and the hares and field-
‘ mice are destroyed by thousands. The animals of a
‘ larger kind, such as wolves, foxes, wild-bores, &c.
‘ have, probably, a *presentiment* of the approaching
‘ flood, as they take their flight to the inland steps;
‘ but, when the high waters take the hares by surprize,
‘ so as entirely to surround them, they seek a refuge on
‘ the

‘ the higher lands, and when the inundation reaches
‘ those also, there is scarcely one that can escape: if
‘ the water does not by chance reach them, the hunters
‘ do, and these take them, with their hands, alive.
‘ Rats and mice will, sometimes, take the resolution
‘ to escape by swimming, and desperately strike, in
‘ troops, for the Wolga itself, in order to gain it’s high
‘ western shore, and in doing this will swim upwards of
‘ two miles, and perish at last; others take to the trees,
‘ where birds of prey wait their coming, and the bjeluga
‘ will shake the smaller trees with it’s tail, tumble them
‘ down and devour them alive; so will they the young
‘ crows that have not learnt to fly. The mouth of this
‘ river, at Astrachan, is full of rushes, and is a harbour
‘ for wild boars, who feed upon the rats that dwell
‘ among them,

‘ The fisheries in this river, though very profitable,
‘ are often attended with great danger, for when a south-
‘ wind rises, the waves of the sea flow towards the
‘ mouth and violently raise the ice. If then a strong
‘ wind from the south, north-west or east, should sud-
‘ denly succeed, it causes a reflux of the water towards
‘ the sea; the ice rushes on and often breaks into pieces
‘ of enormous magnitude. Pieces will drive out to sea
‘ containing fifteen or twenty square miles. When this
‘ happens, all the fishermen that are on it, are soon
‘ swallowed up and lost.

‘ In

‘ In these cruel circumstances, as soon as the unfortunate wretches perceive themselves disjointed from the shore, they keep a look-out, to observe towards what point they are driven by the waves. If they find they are floating to the open sea, they stand in the same place immoveable as statues, waiting the dreadful decision of their fate; but if there remains any hope of reaching land, they leap upon the horses they usually take with them for drawing the fish, and gallop full speed towards the leeward side, hoping the piece of ice, in it’s passage, will come in contact with the shore, and give them an opportunity of leaping on the land in the moment of contact. If they lose this moment, the ice repelled with violence towards the sea, will soon go to pieces by the agitation of the waves, and their destruction is more certain than ever.

‘ It is natural to imagine that a state of life so full of danger, will be followed only by people already reduced to the most abject state of misery, and who have often merited the last inflictions of civil justice by their delinquencies. From the time they embrace this calling, they are fixed in a perpetual bondage, by the advances their necessities oblige them to accept of their employers, who frequently take advantage of this circumstance to subject them to the most cruel injustice; though they only are gainers by their toil, growing rich by their miseries, whilst the
‘ unfortunate

‘unfortunate labourers are plunging deeper and deeper
‘into distress.’”

These fisheries ended, the Cossacks proceed to other business. They travel to purchase bread in the districts of the Wolga and Samara, and towards the latter end of summer, cut and make their hay.

During the hook-fishing, a great many buyers come here from the most distant parts of the Russian empire. Sturgeons caught in winter, are sold to these buyers as they are caught, who dress the fish and roe, barrel it and transport it frozen. Ten good sizable sturgeons will sell for from thirty to forty-five rubles, each ruble 4s. 6d. but a large sturgeon, even without a roe, will fetch six or seven rubles. The largest bjeluga sturgeon caught in the river Jaik, will weigh above 1000 lb. and yield 200 lb. of roe, or caviar. The sturgeons here are about seven feet long, and weigh about 200 lb. but the spawners are generally the largest, and will yield sometimes 36 lb. weight of roe, and are sold, at the first hand, for two rubles. A few years ago, they found a great part of the roe in an old bjeluga petrified, though the bjeluga-stone, which is the petrified roe, is very scarce indeed.

‘This stone,’ says Mr. *Sokolof*, who visited the Caspian fisheries, ‘is found lying lengthways under the
‘cartilages of the back, in the part where the kidneys
‘of

‘ of other animals are. The instant it is taken from
‘ the fish, it is soft and moist, but quickly hardens in
‘ the air. It’s size never exceeds that of a hen’s egg;
‘ it is sometimes oval and sometimes a little flattened or
‘ bent towards the place where it is fastened to the
‘ back. It may be scraped with a knife, but with dif-
‘ ficulty, and does not ferment when mixed with acids.
‘ Though it has little merit, it holds a considerable
‘ rank among the domestic remedies of the Russians,
‘ who administer the scrapings in small doses, mixed
‘ with water, in difficult labours, in the diseases of
‘ children, and against stoppages in the urinary pas-
‘ sages. The value of a stone is a ruble,

The fresh roe, being softly worked with the hand, through a coarse sieve, is thus cleaned, and as in this southern clime, the mild weather begins soon after new-year’s day, they salt it to prevent it’s spoiling. It is afterwards pressed down in barrels with the feet, and conveyed to very distant parts.

They also dry the back finews of the Sewrjug sturgeon, make them up in bundles of twenty-five each, and sell them for food, at the rate of three or four rubles a thousand; and as they hold every part of the sturgeon to be eatable, they preserve the stomach of it, and eat it as a dainty. But the most valuable part of this fish is it’s bladder. Those merchants who buy the whole fish, commonly sell back the bladder to the Cossacks, who

who make isinglass from it, which is done here in one way only. As the bladder is taken fresh from the fish, they wash and spread it in the air to dry, then divide the inner skin, or white skin, which is the isinglass, from the outer; wrap it up in a moist cloth to make it pliable, and then roll it up and pinch it into the form of a serpent or a heart, and let it dry again in the shade. This is sold at different prices, according to what fish it is taken from, from twelve to forty rubles per pud, each pud 36 pounds English.

Salt is also a very considerable article in the Jaikian fisheries. The Cossacks have liberty to provide themselves with a sufficient quantity to salt their fish and roe, which are conveyed into Russia, and use many thousand puds for this purpose. Indeed the steps or heaths about this river are so abundantly provided, by nature, with this mineral treasure, that the inhabitants will never want it. They once fetched this salt in summertime, for the use of the town, from the distance of seventy miles, with an escort of 200 armed men; but at present they have it from the sea-side. Their provisions, when salted, are kept, in all the guard-stations, in pits made in the ground, or in tubs covered with mats and clay.

The Jaikian Cossacks know nothing of agriculture, perhaps the defence of their forts leaves them no time for husbandry, or, as they justly remark, the too great
saltiness

faltnefs of the land will not allow it. I think the Bucharian millet would grow here. This plant prospers, with some care, exceedingly well among the Afatic nations, on a foil and in a climate fimilar to this. It is the only kind of corn the Bucharians have, and the high and thick ftalks of this plant ferve the inhabitants of thofe woodlefs countries for firing. It is no wonder, therefore, that the Bucharians fhould cultivate it, and have a folemn and univerfal feaft at feed-time. A fingle plant will often yield two pounds weight of millet. Tobacco might alfo be planted here with fuccefs, if the Coffacks did not abhor it, from fome religious prejudice.

They are here great lovers of the water-melon, and raife great quantities of them, befides all forts of vegetables for the kitchen. There is not lefs than fifty large water-melon gardens, in and about this town, Jaizkoi Gorodok, the fruit of which is fold for a trifle. Thefe gardens are divided into long fields, enclosed only with a hedge, and to all parts of thefe gardens, they conduct the water in the manner of the eaftern nations, in clay trenches, in order to water the plants fufficiently. Of courfe, thefe gardens are always near fome flowing or ftanding water, where they raife the water by a water-gallows. During the ripening of this fruit, they keep continual watch, to frighten the crows and magpies, which are no where more daring and rapacious than in this diftrict.

Jaizkoi

Jaizkoi Gorodok, owing to it's high and open situation, is a healthy town, and the people know no other disorders than such as proceed from their way of life and a certain contagion of lust, which is a universal and common disorder. All the inhabitants are strong, robust and of a large size, not excepting the women; and this lust-disorder, is a kind of leprosy, little known in Europe, but general along the districts of the river Jaik. It is the same disorder known in Astrachan by the name of the Crimean sickness, brought from the Crimea, in former campaigns. The Jaikian Cossacks assured me, that it was brought to Astrachan by a regiment that served in a Persian war. They call it the black distemper, one of it's first symptoms being a livid colour that covers the face. I saw several persons labouring under it to the highest degree. The patient suffers with it four or five years, before it attains it's height, and they say it is in the seventh year only that it proves mortal. It does not infect all persons who attend the sick, at least not during the four years. I have seen a family in Jaizkoi Gorodok, where the eldest brother was first afflicted with it; three years after, the youngest brother caught it, and one year after this, the mother, and yet the wives of both, who cohabited with their respective husbands all the time, were free and clear from it. It seizes chiefly the robust and persons of middle age. The first and second year, the patient feels no particular pain, nor is sensible of any weakness. His face looks blue, as if he was choaked,

and

and this is followed with a number of blue-red spots or blotches on the wrist, sides and face, which occasions an extreme roughness of the skin in those places, or scurf, called, in medicine, *impetigo*. Some have no spots at all in their faces, for the first year, but a few small ones about their joints. In the beginning of this distemper, patients are somewhat feverish, but after two years, they all suffer the smartest pain in their limbs and joints, begin to lose their appetite, strength and countenance, and become very faint. At this period, the leprosy is more virulent and spreads itself all over the body, not in thick and deep-red spots, but in flat and scabby blotches, which exulcerate by degrees and leave a bad scurf, continuing longer than any similar irruption. When the scurf dries away, the parts itch, and the skin underneath the scurf naturally heals, but if the patient scratches it or picks off the scab, it is followed by an increasing, angry boil, that will penetrate even to the bone. When this happens in the fingers, it destroys them quite, and they will fall away, joint by joint. The legs are commonly most covered with spots, but, by degrees, no part of the body is free from them, except the palms of the hands, the inside of the joints of the arms, the arm-pits, the back-side and knuckle-joints. These parts, even in the most desperate state of the distemper, are always clear as at other times, as is also that part of the head on which the hair grows. Those with whom the distemper continues to the seventh or eighth year, have their nostrils,

the

the inside of the mouth and throat and windpipe exulcerated, and it is probable that the inward and more noble parts are infected with boils e're the distemper proves mortal. Yet in it's last period, it affects the constitution and strength less than one should expect, for the pains are commonly tolerable and the natural functions go on regularly. It does not appear that the patient, as in other leprous disorders, feels an uncommon lustful desire; this appetite they lose gradually; nor do they lose their hair, except on the eye-brows, which are always itching, and on the exulcerated parts. It is said, that this disorder is cured in Crimean Tartary by a decoction of the plant *ambasis aphylla*, which grows there and also about the river Jaik. I doubt much whether mercury would radically cure it. At Orenburg, they salivated a Cossack afflicted with it, in it's middle period; he lost much blood, and afterwards seemed better; but, being suffered to return to his former diet and way of living, the leprosy returned and raged with redoubled violence. Mercurial lotions externally applied and antimonials taken internally, would, probably, be a better treatment, but such experiments require the skill of able physicians.

By way of closing this account of Jaizkoi Gorodok, I will mention some of their most common and pernicious insects, which are moths or tarakans, and crickets; they have also a large kind of wandering field-rat. (The surmulet of Buffon). I no where met with so many

VOL. II. O crickets

crickets as in this place, owing partly to the warm and dry situation of the town, and partly to a bad custom the people have, of stuffing the seams of their houses between the beams, with fine hay, having no moss for that purpose, and these insects liking to take up their abode in this hay. With respect to the field-rat, the Cossacks assured me, there had not been any in their country, about the river Jaik, for three years past, though the northern parts of Russia and Siberia abound with them; but, that owing to a dry and burning summer, vast quantities of them came one evening from the step of Samara to this town, and were seen by many of the inhabitants to make their entrance partly through a certain gate and partly over the ramparts. From this time they became exceedingly troublesome, having remained all the summer in town, for want of food on the step. It is remarkable, and I had it from good authority, that these mischievous guests never trespass on one side of the principal street, which leads through the town, but always keep on the eastern side.

Account of the Kalmucks. During my stay at Jaizkoi Gorodok, I often visited the Kalmucks, who live on the step between this and Samara, in great numbers. But as I could gather from them little of the history of this remarkable nation, during the time when the great Horde retired from the river Jaik, and marched to the western shore of the Wolga, on account of the Kubanian war; I will content myself with putting here together,

gether, what I could collect of their way of living, customs and religion.

‘ According to *Albulgasi*, indeed, they are a branch
‘ of the Mongols, who, in very remote ages, wandered
‘ about the deserts, on both sides of the mountains that
‘ divide Dauria from the present Chinese Mongolia
‘ and the southern parts of the Sayane-hills. Long be-
‘ fore the end of the twelfth century, they were sepa-
‘ rated into three branches under the denomination of
‘ Mongols, Oirats and Burats; *Tschingis Khan*, who
‘ lived about 1300, united them under one monarchy,
‘ became their sovereign and made their several princes
‘ tributary to him. He conquered China and subdued
‘ the Tartars.”

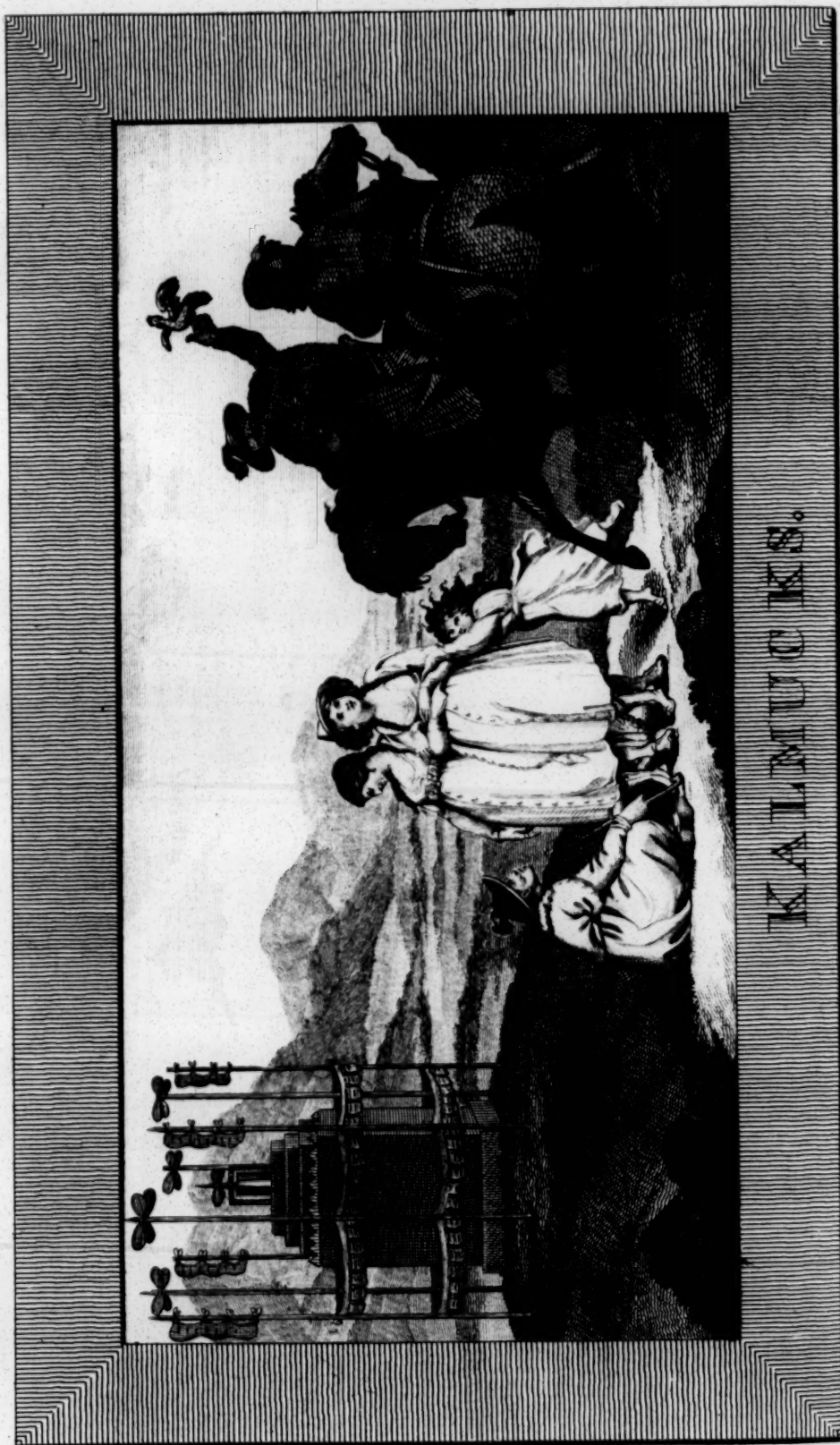
‘ When the Mongols were driven out of China, in
‘ 1368, the united Mongol and Tartar Hordes, after
‘ subduing their western neighbours, spread into Russia
‘ and other parts of Europe, and there formed new
‘ colonies. Under the descendant of *Tschingis*, the
‘ princes divided again, and thus, with the addition of
‘ Russian conquests, the vast Mongol-Thibetan empire
‘ was entirely disjointed in the sixteenth century.
‘ From this dispersion of the people arose the present
‘ Mongol and Tartar nations. *Tschingis Khan* and
‘ *Timur Bek*, who attacked China and wrested it out of
‘ the hands of the founder of the new dynasty of Ming,
‘ sprung from one and the same ancestor.”

Of the three branches, the Mongols, the Burats and the Oirats, I shall speak but of the latter, who are commonly called Kalmucks.

‘ These deserts,’ says *Tooke*, ‘ which the Kalmucks inhabit, lie between the Don and the Wolga, and on the river Ural from Irgis to the Caspian sea. They consist of a stony loam, are quite burnt up, destitute of wood, abound in salt, contain many fresh-water lakes, as well as salt lakes, and produce wholesome herbage, which makes their cattle vigorous and fat.’

‘ The present Kalmucks are of three tribes, Torgouts, Sjungorians and Derbets, and consist of about 20,000 families, dividing themselves into three ranks, the nobility, whom they call *white-bones*; the common people, who are bondmen, whom they distinguish by the name of *black-bones*; and, the clergy, who are descended from both ranks, and are freemen. The noble ladies are called *white-flesh*, the common women *black-flesh*.’

I spell the word Kalmuck agreeable to the Russian pronunciation; but, according to it's true etimology, I should have written it *Chalmack* or *Cbalimack*, this being the name the Tartars give the Kalmucks: Chalmack, in the Tartarian language, signifies revolted. But some Kalmucks give another derivation, from their own language, and say it is composed of the words
Gal,



KALMUCKS.

Burney del.

Published in the "East Illustrated," by J. P. Burney, Esq. 1820.

"Barbarians and the East."

Gal, which, in the Kalmuck and Mongolian language, means fire, and *aimak*, which implies a tribe, or a division of the Ulusses, and thus means *couragious*; in the same manner their brethren, the Mongolians, derive their name from *Men* and *Gal*. The different races of Kalmucks, however, give themselves universally the name of *Eljud* or *Oljud*.

The Kalmucks are, in general, middle-sized men, though there are more short than tall. They are all well-made, and I do not recollect ever seeing one maimed or deformed. The education of their children, while infants, which they leave solely to nature, must give them healthy and perfect bodies, though they are slender and their limbs slight. I never saw a fat, corpulent Kalmuck, at least among the common men; though among the Kirguisians and Baskirs, who live quite in the same manner, many are often very bulky and corpulent. The complexion of their face and body is tolerably white, but their infants are quite so. It being a custom, among the common people, to let their children run about stark naked in the burning sun and the smoke of their felt-tents, and even grown persons sleeping quite naked, it changes their natural complexion to a yellow-brown; but this is not so visible in the women. Among their ladies of distinction, are seen some very white faces, and these appear more so from the blackness of their hair. In this, as well as in the

features of their faces, they are perfectly like the women of China.

It is unnecessary to describe the common features of the Kalmuck men, they being sufficiently known. *Tooke* says, ‘ They are, for the most part, raw-boned and stout; their visage is so flat that the skull of a Kalmuck may easily be known from that of any other man. The eyes too are smaller and the corners of them flatter than among the Europeans; they have thick lips, a small nose and a short chin, and their beard is scanty and appears late. Their teeth are even and white, their complexion a reddish-brown, and their knees always stand outwards, like a bow, which proceeds from their manner of sitting on their ancles and their being almost constantly on horse-back. The women are of the same shape and make with the men, only that their complexion is very clear and of a wholesome white and red.” According to some travellers, one might be led to suppose, that all the faces of the Kalmucks are deformed and frightful, but this is not the case. There are, among both sexes, many round and pleasant faces, some whose features are so regular, that they would not want admirers in any European city; though it seems a characteristic of this people, that the corners of their eyes and eye-brows have a slant direction, and the bridge of their noses are short and flat. I found, that the Dsungorians were generally taller and had a prettier visage than the Torgouts,
the

the former having, probably, received a greater mixture of Tartarian blood, by the rape of the women belonging to this latter nation. As to the blackness of their hair, with which their children are born, I did not see among the Kalmucks, a single exception, nor the least degeneration into a brown colour. Full-grown men have a strong and large beard, but they leave only a whisker turned up on their upper lip, and a tuft upon their under one. Old persons, and especially priests, leave a whisker and let the hair grow over the corners of the mouth, on the lower lip, underneath the chin and about the neck. The rest of the face is kept clear, by plucking it, and cutting it with sizzars and rough knives. The Kalmucks, also, like the Tartars, accustom themselves in this manner to extirpate the hair from other parts of the body.

Having now spoken of their persons, I will proceed to their minds, in which I shall have an opportunity to be more favourable in many points than travellers in general have been. In this respect, they are far before other Nomades or shepherd-nations. The socialness, hospitality, candor, officiousness and a certain gaiety which never leaves a Kalmuck, but distinguishes him from the more phlegmatic Kirguisian, may be called good qualifications, but their idleness, want of cleanliness and knavery, which they too often misemploy, are justly to be deemed their principal vices: a love of idleness is common and natural to all nations who

lead an unlimited, careless and pastoral life; yet the Kalmucks have less of it, owing to their sprightliness. But their filthiness or nastiness can no way be contradicted or excused, and, perhaps, is to be ascribed, as in the lower classes of the French, more to their education and volatility than to sloth; for the Kalmuck women, perform their domestic offices, with great industry, and are, therefore, much courted and coveted by the Kirgueses. As to their mental faculties, their knowledge is certainly much limited, but, in spite of all their ignorance, they have a very good, quick and natural understanding, which might be very easily cultivated and improved, if their way of living and natural sprightliness were not insuperable obstacles. Though generally cholerick, they live more friendly together, than one should expect from their mode of living. Among themselves they are social and hospitable; they like to share every thing that can be enjoyed, and never keep any thing to themselves alone. When eating, drinking, or smoking tobacco, every one present must be a partaker; and if, for example, there should be but one tobacco-pipe, they must all use it by turns. If one is presented with tobacco, fruit, or other eatables, he will divide it with his friends or those who are next him. If a family has made a provision of milk to make brandy of, they will call in their neighbours to help to consume this blessing. But this liberality mostly extends itself to eatables, for they never part with any of their property. However thievishly inclined

clined they may have been described, yet they never steal any thing from their countrymen, unless there be hostilities among the Ulusses. Indeed, most of the robberies with which they have been charged, arise from hostility or a spirit of revenge, but this is not done by violence, but craft. I have been told, that these Ulusses, who, formerly, were under the government of *Nasarmamut*, but now under *Bambar*, one of his successors, a person renowned for his warlike disposition, have always been famous for robbery, but, that among all other Ulusses, if the least care is taken of their property, no such attempts are made.

As the Kalmucks know not how to make any sort of stuff for cloathing, they are obliged to buy it all. The common people seldom wear any thing but sheep and other skins, and felts, which they throw over them in the rain, by way of cloak. The better class of men wear an upper-garment, like that worn by the Poles, except the sleeves which are close and narrow, and an under-garment, buttoned all the way down and bound close to the body with a girdle. Those of distinction wear a short shirt under it, open before, and wide breeches, made of linen, which reach down and are fastened into the buskins. The poor do without a shirt, and are not less gay in their narrow coat or fur, which they fasten round them with a girdle.

The

The upper-garment and boots of the women, differ but little from those of the men, only that their cloaks are lighter made and of better stuff, a little longer and more elegant and lighter about the arms. Those who are ladies of distinction, wear over the under-garment or *befckmet*, a rich and long floating waistcoat, without sleeves, and hang the upper-garment, or fur, upon one or both shoulders. As the women have their under-garment and shirt open before, they can uncover their bosom to the girdle, and always do, in the summer-season, when they mean to be well dressed.

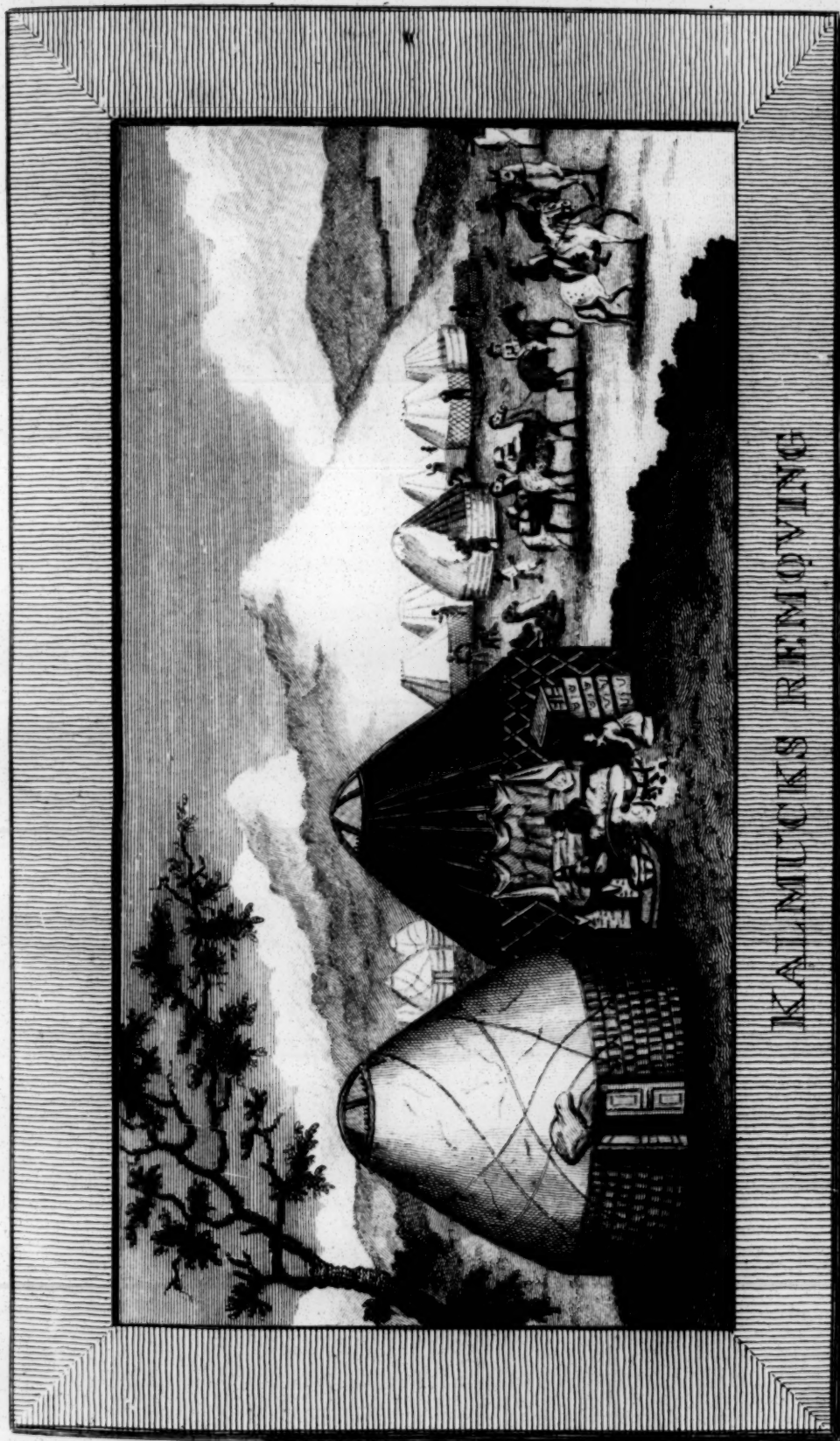
The women would be scarcely distinguished from the men, if it was not for their head-dress, and in this, married women differ from the maidens. The heads of the men are commonly clipt close, leaving only a long tuft of hair behind, in the centre of the crown, which those of distinction generally braid into two or three tresses. The Torgouts wear, both summer and winter, a small round cap, bordered with fur. The Sjungorians commonly wear a summer hat, covered with felt, just like those of the Chinese, except it's being smaller and having a flatter brim. All wear, upon the crown, a large spreading fringe, which hangs down under the cap. A Kalmuck's ears, like those of the Tartars, stand at a distance from his head, and the cap comes down to the root of the ears. This prominence of ear is more visible in the Kalmucks than the Tartars, the ears of the former being rather larger.

Boys

Boys hair is shorn from their infancy, but the women do not like to have their hair cut; girls run about like furies with bewildered locks; but at the age of ten or twelve, when a Kalmuck lady is marriageable, her hair is plaited in as many tresses as she pleases, and wound round the head. When a girl, however, is married, these tresses are undone, and the hair is braided into two large ones only, which hang down in tails over both shoulders. The ordinary class of women, whilst at work, put theirs into a linen bag. The caps of wives and maidens are partly the same, except that the lower class wear them only when they go out or are well-dressed. It is a round, flat cap, bordered with fur and covers only the upper part of the head. Women of distinction wear higher caps of a richer, silk stuff, with a broad brim, cocked up before and behind, and lined with black velvet. They seem fond of spreading, on the top of their caps, a broad fringe, that hangs down on all sides. Such a cap they call *chalban*, the common ones *maikalbu*. All the women wear earrings. ‘Some maidens are silly enough to smear their faces with red and white paint, and some women will wear a large, gold ring in their nostrils.’

Kalmuck dwellings are like those huts made of felts, common in all Asiatic nomades, and very well known in Russia. They are called *Jourts*, the truly ingenious structure of which I will endeavour to describe, for the entertainment of my foreign readers, more circumstantially

tially than has hitherto been done. (See the plate of Kalmucks removing, which represents one Kalmuck tent on the outside and the section of another). The skeleton of these felt-huts consists first of wattled hurdles, formed thirty inches thick, by seven or eight different pieces, seven feet long and five broad, placed one upon another and fastened together in a kind of pannel with willow rods; several of these pannels are set up in a circular form and joined at the ends with hair-ropes, or bands, forming the circumference of the tent. The door is made in the same manner but not so thick, and ornamented with a border; ropes serve instead of hinges, by tying the piece that forms the door to the hurdle next it. Three long willow-poles are then set up, with a ring on the top, made of wicker, to form the roof; through which ring, the ends of a great number of poles are put, the other end fixed in the hurdles below, and fastened with strings. This being neatly executed, the whole is painted red. The skeleton now completed, is covered with felts, or a cloth made of wool, united without weaving, large enough to cover and fit it, and fastened on with cords wound round it. In winter, all is shut close, but in summer, the sides are left open, by throwing aside the covering. In very cold weather, they lay over the whole tent, an additional covering of felts and mats, binding them on as before. The part within the ring at top, is left open for a chimney, but, as a shelter from the wind and rain, some cross circular pieces are fixed over it,



KALMUCKS REMOVING

Brown del.

B. Reading sculp.

Published as the Act directs by D. J. Fowler June 1788.

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on which they occasionally throw a felt, on the windward side, and when the fire is burnt out within, they will cover the whole opening, to keep the hut warm.

In the centre of this tent stands, always, a great iron trivet, under which they continually keep some fire, and over it dress their victuals in large flat iron pots. Great quantities of these pots are made at the iron manufactories in Russia, and sold to the Step-nations. The remainder of their furniture consists of wooden dishes, drinking bowls, large and small bottles, vessels made of leather, a large tea pot, made of wood, but among the better class of people, hooped with copper or silver. Their bed stands opposite the door, behind the fire-place, commonly on a small wooden bedstead, the pillow and bolster of which are made of felt.

Domestic labour falls upon the women only, the men taking no other pains than to build and repair their tents, the rest of their time being spent in hunting, attending their flocks, or in idleness or amusement. It is the woman's business to milk the cattle, mares, cows and ewes, and prepare the hides or skins, to do the needle-work, and every other domestic occupation. They also knead, with their hands, camel, horse and cow-dung, make flat cakes of the composition and dry them in the wind, which is the only firing they use. The women also take down the tents, pack them up and erect them afresh. When the master of a
house

house means to go abroad, it is the duty of his wife to saddle his horse and bring him to the door. In short, the women have so much to do, that they are seldom seen idle. They have scarce time to dress themselves.

In summer-time, they have abundance of milk, which, indeed, is their chief nourishment. They have commonly more horses than horned cattle, and mares milk is what they like best; for, being made sour, it contains such a spirit, that if a person drinks two or three of their large bowls full, it will almost intoxicate him. Their cows and mares will give down no milk unless the calf or colt be present; on this account, colts and calves are kept almost the whole day, about their tents, staked down to a particular spot of ground, with long ropes, and are suffered to suck only at night. Their mothers will feed, naturally, not far from them, of course, they have them always at hand. They milk the mares every hour, and each yields about the seventh part of a gallon, or a moderate bottle full of milk; but, the cows are milked only twice or three times a day. Before milking, the mother is led to it's young one, and as soon as it begins to suck, some one pushes it away, and the milk flows freely; with the cows it is sufficient to shew them their calf, and should it die in the birth or afterwards, they will stuff the skin and tie it up among the rest, in order to shew it to the cow at milking-time; but the mare is not so simple, and they are under a necessity of acting cautiously with these,
left

lest it should make them stubborn and refuse their milk entirely.

Fresh mares milk is much more fluid than the milk of cows, but, on account of a little alkaline taste, is not so pleasant ; yet, if they turn it with cleanliness, it has a most delicate vinous flavour. It yields hardly any cream, of course it is not fit for butter, though some writers falsely say it is ; but it is richer in spirituous and fermenting particles. In winter, when they have but little mares milk, they make shift with cows milk, which is much less spirituous, and, when turned sour, has a more disagreeable taste.

In order to turn the milk, they pour it gradually into large leathern or other vessels, which, in winter-time, are set near the fire, either above or underground. Commonly, unclean vessels alone will turn it, but if not, they forward it with leven, made of flour and salt. As they distill a spirit from this sour milk, they sometimes turn it with a little of this spirit, if they have any or can borrow it from their neighbours, and sometimes with a little of the sour milk which they find in the stomachs of the lambs they kill. Milk designed for distilling they take no cream from, but beat it about now and then with a stick, as they do in making butter ; or, as the milk is collected in summer in leather bottles, they shake it well twice a day, and this will turn it.

When

When they have collected a sufficient quantity of such milk to make themselves merry, and the whole has stood to four, at least one day in summer, but more in winter, the women distill a spirit from it in the following manner. Having set over the fire the largest iron boiler they have, being first rinsed with water or melted snow, after shaking the milk, they pour it into the boiler, and fill it, within two fingers breadth of the top. This kettle contains about two or three Russian pails full, or more. It is then covered with a hollow cover that fits it, made of two pieces of wood, having two square openings; the edges of this cover and the places where the wood joins are luted with clay, glue and fresh cow-dung. The Kalmucks of Stawropal use in winter, a stiff dough of coarse flour. Near this boiler is set a smaller one, with a similar top, and from the opening of one to the other is fixed a curved wooden pipe, forming a still, and thus, with a slow fire, they will distill, in an hour and a half, a bad spirit, to the amount of one fourth of the milk if it be cows milk, and one third, if mares milk. But the spirit distilled from mares milk, is seldom strong enough to burn, that from cows milk never, unless it be distilled a second time.

When this liquor is made, and the neighbours are assembled to partake of it, the master of the tent throws some into the fire, some up the chimney, and after breaking a point of the clay-cover, pours a little also
on

on them. So done, he fills a bowl, which contains a moderate bottle full, from the remainder, and hands it round, according to the age of the persons present, serving the oldest first, without any respect to sex. The Kalmucks say, that this milk-brandy does not intoxicate so quick, or in such small quantities as Russian brandy, but that, if a man gets drunk with it, he will continue so two days, and must sleep longer to recover himself.

The remainder of this milk, after the spirit is distilled from it, is exceedingly sour, and they either mix it with fresh cows-milk and drink it immediately, or save it, to steep their sheep and lamb-skins in; or else they boil these dregs with some fresh cows milk, till it grows thick, then pour the curd into bags, and, after squeezing it well, dry it in the sun and eat it as cheese. They make, also, a kind of cheese from ewes milk, which they eat in winter with butter. Indeed this is the only use they make of ewes milk, deeming it unfit for distilling. To make butter from cows milk, they boil it well, turn it sour in the course of one day, beat it with a butter-staff and pour it into a bowl, when the oil or butter will swim on the surface, which they skim off and keep in leather vessels.

They are never at a loss for meat in summer, as they can procure it in abundance, either by hunting, or from such of their cattle as die a natural or accidental death,

death. Very rarely do the Kalmucks slaughter their own cattle, but from necessity, or on some great festival. This is done only by the rich and by the first class of people. Birds, of all kinds, they are very fond of, if fat. The badger, the marmot, and the rat, are their peculiar dainties. They account the beaver, also, to be wholesome food, unless it be too fat. Besides these animals, they eat wild horses, wild goats, wild boars, and all sorts of birds, even the largest bird of prey: yet they abhor the flesh of wolves, saying, it is bitter. They eat, also, the fox and the smaller kinds of thieving animals with reluctance. When they have plenty of meat, in summer, they will cut it into narrow slices, dry it in the sun or, in rainy weather, over a smoking fire within their tents, and lay it up for winter and travelling provisions. ‘ Even the chiefs and first people among them,’ says *Tooke*, ‘ will feed upon cattle that have died of distemper and age, and let the flesh stink ever so much, they will eat it without disgust. For this reason, in every horde, the flesh-market has the appearance of a lay-stall of carrion.’ Bread and groats they purchase from the Russians; for, as they eat but little, they never cultivate any land or sow any corn. I have been informed, however, that some of the Ordinzian Kalmucks have settled about the Caspian sea, in order to establish fisheries and cultivate the tobacco-plant, of which they are very fond. There are certain roots, also, which they eat, as the knots of the sage-tree, (*phlomis tuberosa*) which they call

call *Bodmon*. After drying it and reducing it to powder, they boil it into a pulp with milk. They eat, also, the chichling vetch, (*Lathyrus tuberosus*), which they call *Schnok*, and boil it with their meat; and also the roots of a sort of sun-flower (*umbellata*). Instead of tea, which they boil in the Mongolian fashion, with milk and butter, the common people gather on the steps, a kind of small liquorice, ' which they boil ' with salt and milk; they are great lovers of mead and ' brandy, and both sexes smoke tobacco at an enormous rate.'

I made many enquiries into the manner in which the Kalmuck women tan and prepare the different sorts of hides and leather, and found it to be as follows. When they mean to dress their fine lambskins with care, they first wash them clean in luke-warm water, spread them in the air and let them get a little dry. They then scrape them, on the inside, with blunt knives, to take off the flesh-skin that may hang to them and render them more supple: this done, they spread them out in the air, on a piece of felt, and rub them over for three days successively, thrice a day, with the dregs of the milk after it is distilled, or with four cows milk, in which salt has been dissolved. On the fourth day they suffer them to get quite dry, and work them between their hands on their bosom, till they become quite soft and pliant. After this, they are smoked, to make them resist rain the better and pre-

vent the rain from spoiling them. For this purpose they kindle a small fire in a little pit, and throw over it dry, rotten wood, dried dung and other things that will create smoak. Sheep-dung is considered the best for this purpose. About the pit they stick poles in such a manner as to form a pyramidical figure, and cover these with skins, so as to keep in the smoke, sometimes changing their situation, that every part may be equally smoked. This is continued for an hour, and, as it renders them stiff again, they are a second time rubbed with the hands, till they are of a proper softness; they are next rubbed well with bruised chalk, scraped clean and polished with sharp knives, and, at last, whitened with pieces of chalk. Nothing then remains but to clean and beat the fleece.

When they mean to bestow less trouble, as is the case with coarse skins, they lay them over with a paste made of ashes and salt water, to the thickness of the skin itself, and as the skin absorbs the lye, they do it afresh; next day they scrape the flesh-side clean and wash it with sour milk, and when dry, the skin is worked soft, and whitened with chalk. Some wash these skins after they are smoked, and rub them with half-boiled ox and sheep liver, which have been laid some days in milk to rot and become a pulp. This makes them soft but gives them an intolerable, bad smell. All the furs they prepare for their own use, are sewed by the women with fine, split sinews of horses, bullocks and elks, drying, beating

beating and tearing them into threads, which surpass all kinds of thread in solidity. Horse and bullocks hides, of which they make leather vessels, are prepared by the Kalmucks, in the following manner. They first scald them in boiling water to get the hair off; (the backs of ox-hides make the best vessels), but some lay them in ashes to get off the hair; which ever way it is done, they are next scraped and smoothed with knives, and washed clean in flowing water. Others prepare them by soaking them a week or more in sour milk, in which a little salt has been dissolved. Boot-leather is prepared in this last way. But, in order to make the best kind, the hides are spread, as they come out from the water, in the sun, and the women, most skilled in this business, cut out the pieces that are to form the vessel, sew it with sinew-thread and dry it in the smoke. They manufacture in this manner, not only vessels with wide mouths, giving them their form whilst drying, but all kind of bottles and vessels with narrow necks. In order to preserve the form, they continually blow into them whilst drying on the fire, or fill them with sand or ashes. The outside they embellish with a variety of lines and figures. They even contrive to make tea-pots of leather, resembling the China ones, and make them very neatly: as soon as they are dry, they are fit for use; but in order to keep them firm and not liable to get soft with liquid, and to take away any bad smell, they smoke them well for some days. And as rotten and dried cow-dung is seldom to be found on the heaths, they collect it by degrees,

and do not begin to make these vessels, till they have got a sufficient quantity to smoke them with. They are smoked within these pyramids, till they are as transparent as horn, and equally solid. I have seen some of their bottles, which would hold as much as five or six pails.

Thus does the womens industry procure the men an easy and an idle life, which, as, by their constitution, they are all soldiers, is perhaps not reprehensible. Besides the profession of arms and the care of their flocks, it is the department of the men to mend and repair their tents, and when they give a daughter in marriage, to build the young couple a new one. In the manufacturing of felts, the men take also an active part. Having sheered their sheep in spring and summer, with sharp knives, they spread the wool out on an old felt carpet or mat, on which it is well beaten by ten or twelve persons, sitting round it, till all the dust is out. It is then equally spread upon a felt, the exact size of the one that is to be made, and in spots where they want to vary it in colour, they place, over the first layer of wool, dyed wool of those colours, This done. they carefully roll up the whole together, and tie it tight with hair-cords; then all the people present sit down in two rows, opposite to each other, take the rolled felt between them and raise it to their knees, throwing it from their knees again on the ground, with all their strength, and continuing this for some hours. This unites

unites the wool into a body, and when they think it is sufficiently matted, they unroll it, and repair, with the hand, any defects that appear in it.

Kalmuck arms mostly consist of lances, arrows and bows; the latter are made of different kinds of wood, but chiefly of the plane-tree. They have a variety of arrows, some short, made wholly with wood, with a knob at the end; with these they kill small animals and birds; others are light arrows, with small iron-points, and some, war-arrows with a strong iron-point. All these arrows are winged with eagle-feathers, taken from the tail of the bird, as the wing-feathers are apt to carry the arrow out of it's direction. They are contained in certain divisions in a quiver, and hung on the right-side of the saddle; the bow, in a scabbard on the left-side. The more opulent Kalmucks have fire-arms. Such as are well-armed wear a breast-harness, like those of the eastern-nations, consisting of net-work, made of iron and steel rings; getting these from the Truchmenians. I have seen such breast-harness in Persia, worth more than fifty horses, consisting wholly of polished steel. There are, however, cheaper ones, which they get in barter for about seven or eight horses. Their full-armour consists of a round helmet, with an iron net-work, that hangs down, round the neck upon the shoulders, but only as low as the eye-brows on the face; a coat of mail, with sleeves to the wrist, covering the back of the hand with a slip, fastened between the
P 4 fingers;

fingers; and two arm-harnesses, extending from the elbow to the wrist, and buckled on the outside of the arm, to defend it from blows in any engagement.

The iron-work used for their arms, is made among themselves. There are a kind of petty jewellers also among them, who make ornaments for the women, and embellish tea-pots with silver figures of animals and hoops. Their tools are very simple. Their bellows consists of a leather-bag, with a pipe, fixed between two boards, which they extend and press together.

Their manner of hunting is various, and they are expert in taking wild beasts with any kind of trap or snare; they also shoot very exactly with arrows and fire-arms. Kalmucks of distinction, are very fond of hawking with a kind of hawk (*falco lanarius*), which frequents this district, and is much valued. They keep also dogs, which have long ears, are good house-dogs and expert at the chase.

The great wealth and substance of a Kalmuck, are his flocks and herds. But they keep more horses and sheep than horned cattle or camels. Their horses are not much smaller than those of the Kirguese, are tolerably high, slight, but are neither handsome nor ugly; they are strong enough for draught, but too wild; as to swiftness, they are inferior to none; as they have no other
feed

feed than what the steps afford, they will live any where and almost upon any thing. Indeed, a Kalmuck never accustoms them to regular feed, fearful of increasing their wildness and ferocity with their strength. Some Kalmucks own a hundred horses, and other cattle in proportion. They cut their colts at the proper season, by opening their *scrotum*, catching hold of the spermatic vessels and nipping off the testicles with their nails, searing the part with a red-hot iron. They do the same with sheep and calves. That they may never want mares milk, they suffer the stallions to run continually with the mares.

Kalmuck sheep, like those of the Kirguese, have very thick and fat tails, though not quite so large as Kirgussian sheep. Their rams have hanging ears, seldom any horns, and their wool is less hairy, generally white with spotted faces. The sheep here are suffered to feed in all seasons, and, as they lick the snow, require no water. Among the Kalmuck flocks are generally a few goats, with pendant ears, spotted with several colours, having long hairs hanging down their legs, but seldom any horns.

As camels multiply but slowly, their property in these is but small, but they have as many as they want and often some to sell. They have some with one hunch on their backs and others two. Many are taken to Orenburg market, and there trucked away to the Buchar-
charians.

charians. This animal thrives well on the steps, among the salt-plants, but requires attention in winter, it being necessary then to cover their loins with mats or old felts.

Kalmucks pass the winter with their flocks in the most southern district of the Wolga step and along the Caspian sea, but always at some distance from the Jaik, where the Kirguese, their most cruel enemies, have fixed their abode. They find there plenty of reeds to kindle fire with, and as it snows but little, the cattle have no difficulty in finding food. With the beginning of spring, they draw, by degrees, to the north and seek the hilly and watry districts of the milder step, till after the Wolga has entered within it's bounds, and offers a richer pasture in the lower lands.

The Kalmucks thus emigrating, in order to seek a better pasture, find an uncommon advantage in their camels. These animals not only carry their tents and all belonging to them, but also their household furniture, trunks, bags of cloaths and other little matters. They will not employ the one-bunched camel, particularly white ones, which they call *Bucharians*, but to transport their sacred books, their idols, or burchans, and other holy articles. These sacred things are packed up, loaded on small waggons and drawn by white camels, decorated with large and small bells; and nothing is pleasanter than to meet such a suite of Kalmucks.

mucks. ‘ The fine herds march foremost, feeding as they go; next follows a large company of armed herdsmen, next the camels and oxen, with the horses and furniture, then the women and children on horseback, in their gayest apparel,’ driving the cattle, and singing merrily as they pass, whilst a number of the men rove about the environs of the road, hunting. Indeed, the chief part of this peoples life, which to us appears wretched, is interwoven with gaiety, and the more unfortunate we deem them, the happier they find themselves. However unwholesome their nourishment and habitations may appear, yet many arrive at an advanced, old age, gay and free from infirmities.

I cannot say much of their diseases, which are not many in number, like those of civilized nations, on account of their plain way of living: but as their chief aliment is meat, and that eaten half rotten, it is easily to be conceived that they must have some inflammatory diseases. The most dreadful and dangerous disorder among them, is a burning and infective fever, mortal on the eighth day. Where it seizes families, it will carry off one or more from each tent. Those who live in the neighbourhood of such as are afflicted with this distemper, fly from their abode and search, at a farther distance, for a safer one. The itch is also a frequent complaint among the lower sort of Kalmucks, which arises from their manner of feeding and their indolent state of life, during the winter. But they are more afflicted

flicted with the *furor amorosus*, arising from the scald. The biles, indeed, make their appearance but seldom, but when they do, they rage with virulence. This is also observed among the Kalmucks of Stawropal, who are more subject to it; so that it is clearly, in a great measure, owing to the quantity of animal food they eat. Owing to their smoky tents, the intolerable heat of the sun, and the yellowness of the heaths; inflammations of the eyes are so frequent that many wear a slip of crape over them, by way of prevention. 'The schoolmaster
' is generally the surgeon; he feels the pulse, opens a
' vein, scarifies and clysters.'

It is time now to say something of their political and religious constitution. The Kalmucks were once subject to certain chiefs, whose prerogatives were hereditary. Even, at present, the nation is divided among little, tributary princes, who call themselves *Nojonn*, and pay but little obedience to the Khan, that overrules the whole. The horde subject to such a *Nojonn*, is called *Ulus*, and is subdivided into small fraternities, living not far from each other, under the name of *Aimaks*, consisting of from 150 to 300 families, who are subbordinate to certain nobles, bearing the title of *Saiffang*. Each *Aimak* is again divided, on account of the pasture, into companies of ten or twelve tents, composing what they call a *Chatun*, which, properly speaking, implies a boiler, so that *Chatun* is a society which cooks out of the same boiler. Each *Chatun* has an
overseer,

overseer, who owes obedience to the Saissang of their Aimak, as does the Saissang to the Nojonn. A Nojonn receives tithes of cattle from all his subjects. He has a right *ad libitum* to inflict corporal punishment for all misdemeanours, and can sentence them to have their ears, nose and hand cut off, but not to take away any man's life publickly; though he exercises this power privately, on those who incur his displeasure. If a Nojonn has not regulated the succession in his life-time, or made priests of some of his children, they will, after his death, divide the ulusses among themselves, and this division is commonly very unequal. The mode of saluting a Nojonn, among the common Kalmucks, is by closing the hand, holding it to the forehead, and then touching the Nojonn's hip therewith, and, if the Nojonn thinks proper to return the compliment, it is by striking the other on his shoulder.

‘ The princes,’ says *Tooke*, ‘ are only dependent
‘ on the Khan, in matters of general importance; in
‘ every other respect, they are independent. They ac-
‘ quire their ulusses by hereditary succession. The
‘ Khan has a privy-council, or *sarga*, consisting of
‘ Nojonns, Saissangs and Priests, wherein sits an assessor
‘ from every uluss, and an advocate from the
‘ government's chancery at Astrachan; and, here it is,
‘ that laws are enacted.’

There

There are several other dignities, or titles, conferred by the Nojonns or Khan, as the sovereign lord of the ulufs, but I am not acquainted with them. Every ulufs has, at least, one chief Saiffang, whom they honour with the appellation of *Tarchan*. Another title, belonging to those nobles who are about the Khan and chief princes, is *Taischa*; these are sent as ambassadors, (*Darga*), from one ulufs to another, to the Russian cities and governors.

‘ The establishment of the hordes is altogether military. Every subject must, on the first orders, repair on horseback to the head-quarters of his prince, armed and with a good stock of provisions. The troops are assembled almost as soon as the order is known. The prince musters them, and sends the feeble and the wretched home again. This muster lasts some time, and procures the serviceable men the distinction of Men of war. The head-quarters of the prince are known by the whiteness of the tents, and by being surrounded by other tents in a circle.’

‘ The army is composed of regiments of unequal numbers, and every regiment (*Ottok*) is divided into hundreds. Each regiment has its colours painted with the idol-gods of war, dragons, serpents, tigers, lions, &c. its colonels (*Tzrigen yassool*), captains (*Soom yassool*), and other officers, but no martial music. Every regiment is composed of three companies,

‘panies, musquetry, bowmen and neck-breakers, or
‘lance-breakers. The musquetry first attack, next
‘the bowmen, and, last of all, the neck-breakers.
‘They fight with courage, and usually conquer all
‘that fight in their way: but, against the regular
‘troops, I mean the troops of government, they can
‘make no stand, except when they are vastly superior
‘in numbers. When they serve the Russian crown,
‘they are equipped and paid as Cossacks.’

It is very remarkable that the Kalmuck princes have long since thought of and enacted laws, which would put those European civilised nations to the blush, who, with an affected disdain, presume to call them barbarians. They have a code of laws written in Mongolian language, which, in the reign of *Galdan-Khan*, was improved and ratified by twenty-four Mongolian and Uiratian princes, in the presence of three *Kutuchts*, or high-priests; wherein they trifle not with the life of a man, nor inflict on him ordinary and extraordinary tortures, in order to force from the weak and innocent a confession of crimes he never thought of: the penalties in their code of laws, are forfeitures of property, proportioned to every degree of crime. I will mention some. For treason and hostilities among princes and vassals themselves, the penalty is forfeitures of their whole property, or such a mortification as the wealth and rank of these princes will admit of. For desertion in general war, for cowardice or ill-conduct in battle,

battle, the forfeiture of a commanding-officer is as heavy as his circumstances will admit of; their arms are taken from them, they are degraded and led about in womens clothes. For murder, the punishment is very great, but does not affect the life, nor wound the body of the criminal, even though he were a parricide. If men quarrel and fight, and one is killed, every one who was a stander-by and did not strive to prevent it, is fined a horse. Where a man is killed in publick games, the party killing is to receive and maintain the wife and children of the deceased. For assaults and wounds the fines are proportioned to the injury done; it is enacted how much shall be paid to atone for a tooth, ear, and each finger of the hand. Parents or parents-in-law, who beat their children, without a cause, are also liable to fines. There are also fines for insults or affronts, the principal of which to men, is pulling the hair or beard, tearing off the fringe from the cap, spitting or throwing sand in the face; and, to women, pulling their tresses, or touching them wantonly on the bosom or elsewhere. In this latter case, the punishment is adapted to the age of the transgressor. For adultery and whoredom, which is often committed with slaves, and for bestiality, the fines are but small. It would be too extensive to give a detail of the fines annexed, for interruption of hunting, extinguishing of lamps, detaining lost cattle, or keeping a lost carcase without giving notice of it, and other little cases. The severest punishment is inflicted for theft. Besides the
restitution

restitution of the stolen goods, and a fine of cattle, it is enacted, that the robber, even of a trifle, shall lose one finger, unless he thinks proper to buy off this corporal punishment, by paying five head of cattle. There are even fines annexed to stealing needles or yarn. And, in an appendix to this code, *Galdan-Khan*, himself, added, that an overseer of one hundred tents, or an amiak, should be responsible for the thefts committed by his subjects: and that the overseers of a chatun, knowing of a theft and not giving notice of it, shall lose a hand; but the common people are to be laid in irons, and he that has been three times convicted of theft, shall lose all the property he has. The fines are chiefly great and small cattle, in proportion to the circumstances of the delinquent and the heinousness of the crime or offence, and are divided between the nojon, the clergy and the plaintiff. The fines of persons of rank are a certain number of arrows, helmets and other warlike accoutrements. The highest fine inflicted on a prince for hostility, is 100 coats of mail, 100 camels and 1000 horses; and, to enforce the payment, the other princes are to rise in one body against him; and should he have ruined whole ulusses, or large aimaks, they deprive him of his all, keeping one half to themselves and dividing the other among the injured party. For some crimes, the perpetrator is to lose one or more of his children. The smallest fine is a male or female goat, or a small number of arrows.

‘ Some of their laws are a kind of proverbs’, says *Tooke*: for example,

‘ Let him that proves faint-hearted in battle, be
‘ carried through the camp in women’s apparel.’

‘ Let him that lifts his hand against his commander,
‘ or senior, pay a penalty of twenty-seven head of
‘ cattle.’

‘ Let him that commits murder, lose his wife and
‘ possessions.’

‘ If any give a blow in an affray, by which he breaks
‘ his antagonist’s thumb, let him forfeit eighteen head
‘ of cattle; if the middle finger, nine, &c.’

‘ Let a thief, who cannot make good what he has
‘ stolen, be beaten, and drag after him a log; and
‘ also be marked with a burning iron. If the theft be
‘ great, he may be sold for a slave.’

Rape of a virgin is fined nine head of cattle, and
adultery the same.

Among their laws, it is also stipulated, that a be-
trothed girl cannot be married under the age of four-
teen, and not later than twenty, and then, if he, to
whom she is betrothed, will not take her, she may be
given

given to another, provided the nojonn has been first made acquainted with it. The number of cattle, which a father may accept for his daughter, and the reciprocal present he is to make, are ascertained, according to the rank of the parties, ‘ from fifty camels and ‘ four hundred sheep to fifteen horses, as many oxen ‘ and twenty sheep.’ It is also a law, that every year out of forty kibitks, or habitations, four persons must marry. Each is to receive from the public fund ten head of cattle, as a reward or purchase for the bride, and the bridegroom is to have from the father some old cloaths in return.

‘ None dare appear before the prince otherwise than ‘ sitting on his legs, but without crossing them in their ‘ ordinary manner. All heads are uncovered, when his ‘ commands are recited.’ Common people greet each other with a *mendu*, which implies the same as *salve* or “ Save ye,” among the Romans. ‘ If it be a long ‘ time since they have seen each other, they lay their ‘ two hands flatways together. On the festival Zagan, ‘ they kiss each other, but at other times never, not ‘ even between lovers. In conversation, they are not ‘ very ceremonious, but are excessively submissive to ‘ superiors, and shew an uncommon reverence to the ‘ aged.’

When taking a solemn oath, they put the muzzle of their firelock to their mouth and kiss it, or, in want of

such a piece, touch their tongue with an arrow, put it's point to their head, and say, ' God destroy me ; ' I will be born again in no wild beast, if I say an un-
' truth ! ' In weighty and important cases, they are proved by fire-ordeal. The head of an ax, or other iron, is heated till it is red-hot, and the accused is to carry it at the end of his fingers, to the distance of some fathoms. If he does this, and is not burnt, he is acquitted of the charge. I was told, that some are so skilful in this business, that, by moving their fingers quickly, they will receive no injury, which is considered as a proof of their innocence.

But I must proceed to their religion, and speak of those spiritual and temporal customs as have any connexion with it. Their doctrine is the religion of *Lama*, mostly the same with that of their brethren, the Mongols, whom they copy in language, writing and manner of living. In this religion, we find, as in that of Brahma, a complete system of the structure of the world ; it's past and future state enveloped in a labyrinth of fables and crafty illusions : it includes the old doctrine of Metempsychosis or the transmigration of souls, in so strict a sense, as that all their deities, who formerly were men, had, before their deification, been rigorously subject to their law, having wandered through many animal bodies. They pass from the body of one beast into another, till they have gradually effaced their slight transgressions, by penance and remorse.

morfe. Common fouls proceed directly to the judgment-feat in Paradife, without any wandering, and receive the decree that difpofes of them for ever. This is their faith, at leaft as to their principal idols. The Kalmuck religion, in the externals or ceremonials, has fo near an affinity to many practifed by fome fects of chriftians, I mean in their opinions of the change of the world, and feveral other points, that it is probable, to thofe who give a fcope to conjecture, that the religions of Brahma and Lama, are much connected with that of the Nestorians. Some few ceremonies in their divine fervice, which I will describe, will juftify this fuppoftion; but, before I proceed, I will give my readers fome account of the Lama doctrine, which is contained and difperfed in innumerable writings, part of which I have collected from feveral tranflations of little Mongolian, theological authors, which I was favoured with from the Proto-pope, or high-priest of the chriftian Kalmucks, at Stawropal, *Andrew Tſchuboffkoi*, who is perfectly acquainted with their language. I ſhall add, alfo, what I could gather from converſation, reſpecting this extenſive, fabulous doctrine, that a better knowledge may be formed of it, and that it may be ſeen how far the Brahma faith correſponds with it. I have been informed, that the Indians, of which there are no ſmall number in Aſtrachan, not only acknowledge the Kalmucks to be their brethren, but pay, alfo, divine honour to the Kalmuck idols, called Burchan Ajuſcha and Dſchakdiſchimmuni, which have a great

resemblance to those of the Tangutians. If this be true, it is an incontestable proof, that the religion of Lama originated in India, and that the Kalmucks are descendants of the Mongols.

In the beginning, we have the whimsical story of the Lamas, about the system of the universe. They say, that at first, without any creator, there was an immense space, or chaos, whose width and depth amounted to 6,160,000 leagues, or beres, (each league or bere being equal to about six English miles); but, they fix no time of it's commencement. In this space gathered some gold-coloured clouds, which shed a rain so abundantly as to form the unmeasurable ocean. That an immense thick froth grew upon the sea like milk, (the dimensions of which, is also expressed in their books), and that from this froth issued all living creatures; and that from men their idols were produced. That a storm next arose, from certain parts of the heavens, which gave existence to a column extending from the upper-region, to far below the deepest bottom of the elementary ocean. They call this column *Sjumer Sula*, and say, it's circumference amounts to some thousands of leagues, or beres. About this column, as an axis, move the habitable worlds. But how the sun, moon and stars came to exist in the upper-regions, their treatises give no account. They say the sun consists of glass and fire, and is some hundred leagues in circumference. And, as they hold glass

to be one part of the body of the sun, and have burning-glasses among them, it is plain that such glasses must have been known a great while in the east. They deem the moon to be somewhat smaller than the sun, and make it consist of glass and water. The number of stars they fix at ten thousand millions, which will lead our astronomers to judge of their other calculations. The sun, in the Kalmuck system, has an orbicular course round the middle part of the great column, or Sjumer Sula. This column shews four sides, each of a different colour, one silver, one sky-blue, one golden and one of a deep-red. When the sun casts it's beams on the silver-side,, the dawn begins, and if, by degrees, the bright-blue is illuminated, noon makes it's entrance, but it is not perfect noon till it shines upon the golden side; and when it throws it's light on the deep-red side, the twilight commences, and continues till the sun hides itself from our view behind the column, and this is night.

About the column, they say, roll, in general, four great worlds, and between these the smaller ones, joined in couples, of which they reckon eight, and all the stars and worlds are made fast to it with a great iron-ring. Among the greater worlds stands ours on the right, which they call *Sambu-tup*, as a great number of trees grow on it, unknown to them, but called by them, *Sambu-barachia*. Opposite to this, is a world inhabited by giants, (*Ulyum schibiytu-tup*). The

third world they call *Ukir-edlektfchi*, on which there are only cows; but, in the fourth world, *Mun-do-uto-tup*, exist a people without souls. They live 7000 years without sickness, and when the time of their dissolution draws near, on the seventh day preceding their end, they hear a voice calling them by their names, and announcing their dead-warrant. They then call their relations and friends together, and take a lasting farewell.

They describe all these worlds as very extensive, to which no other creature, except their idols, can pass, and these can go from one world to another. Besides these worlds, they reckon seven other abodes, eight little oceans, and many clouds, on which reside their aerial spirits in the vast *vacuum*, and say that the whole system is encompassed and fastened, as it were, together, by an enormous iron-ring; giving and relating circumstantial stories of all these brainless chimeras.

In our world, they say, spring four principal rivers, from four mountains, to which they give the following remarkable names, *Ganga*, *Schilda*, *Baktfchu* and *Aipera*. Between these four mountains feeds, for four months in a year, an elephant, of which they relate many wonders, and call him *Gasar-Sakikjin Kowen*, or the protector of the earth. This elephant is some miles long and high, and white as snow, has thirty-three red heads; on each head, six trunks; on each trunk

trunk six fountains, and upon the fountains six stars; each star beset with a virgin-offspring of their aerial spirits. On the central head of the elephant rides the great genius of the earth, called *Cburmustu Tenga*, when he goes from one place to another.

Immediately after the creation of the world, men reached a very distant age, lived nearly 80,000 years, were fed by invisible gifts of grace, (*Kidi-Dianar*) and had the wonderful power of raising themselves to heaven. All this time transmigration was general, and all men were *Cbubulgans*, or regenerated. This regeneration in human bodies, according to the doctrine of the Lamas, is a thorough change from common mortality, (a rare prerogative allowed only to the clergy, some persons of a holy disposition, and to the *nojonns* or princes). It was also in that age, or epoch, when the thousand Burchans, or idols, whom the Kalmucks worship, went to heaven,

This was followed, say they, by an unlucky epoch. The earth produced a certain sweet-tasting herb, like honey, which is called, in their books, *Schime*, and there was a voracious man who eat thereof, and made it known to all the rest. Hereby, all the holiness of mankind, and their power of flying to heaven, ceased, their longevity and gigantic stature decreased, and they lived a great while in darkness, till the sun and stars took their origin,

After

After men had fed a certain time upon this plant, it failed, and they were forced to support life with a kind of earth-butter, that looked ruddy and had a very sweet taste; but this failing also, they had recourse to a sort of sedge (*sala-semis*), and began to store it up and make provision of it; but instead of it's encreasing, it fell entirely away. This is the epoch when virtue took her flight from the earth, and adultery, murder and injustice made their inroads among men. They began at this time to cultivate the land, and chose the wisest among them as their chief. This chief divided the land and other goods among his people, and is, at last, become the Khan.

In this state, according to their opinion, lives the present age. During the past golden-age, several of the thousand Burchans or idols of that happy period, appeared on earth, in order to reform mankind. For example, at that time, when the life of man had decreased to 40,000 years, appeared in the empire of Enednai, (which, perhaps is that of the Mogul), *Ebdefchi-Burchan*, (the destroyer), and preached religion. At the decline of human life to 30,000, he was followed by *Altan-Dschidakti-Burchan*, (the golden unalloyed). When life fell to 20,000 years, came *Gerel-Sakiktshi-Burchan*, (the preserver of the world), * and after

(*) One might suppose, that under this and the preceding name, lies some obscure and deformed tradition of the Saviour. him,

him, *Mafsuschiri-Burchan*, upon this world ; and, finally, when the limits of man's age dropped to one hundred years, the great Burchan, and founder of the doctrine of Lama, *Dschakshimuni* came down and preached to the sixty-one nations of the earth. But it is to be lamented, say they, that each listened to the doctrine with different ears, it having produced as many religions and languages as there are nations.

DSCHAKSHIMUNI.



The following are the revelations of Lama, on futurity. The age and also the form of men, and all created

created beings, will, from our times, so much decrease, that horses will not be bigger than hares, and men will be scarce three feet high, will live but ten years, but will be marriageable at five months old. After this, sickness and death will come among them, and carry off the greatest part. Before all people die, the aerial spirits will make themselves heard, and it will rain mortal shots. A few of the remaining dwarfs, frightened out of their senses, will take provision for seven days, hide themselves in dark holes, and the land will be over-spread with carcases and blood. After this, will follow rain, which shall wash away all the dead bodies and every impurity into the desert ocean; and a fragrant shower will cleanse the earth; then shall the heavens rain down cloaths and food for those whose lives were spared, and they shall begin to live virtuously, and a vast space of time shall pass, during which, the limits of human life shall extend to 80,000 years. When this epoch shall be fulfilled, the age of man shall begin again to decrease, a regenerated Burchan, bright with holiness, called *Maidarin*, shall come into the world, and his greatness and beauty shall be wonderful and ineffable. Men will be astonished, and enquire of him the cause of his form and beauty, and when the idol shall have told them, that he has attained such perfection by a victory over his passions, abstaining from all murder, and practising all virtue, men will become converts and attain a similar perfection by the same means.

This

This is the Kalmuck system of the universal restoration of all things; but, from the different epochs and changes which the world, in their opinions, is still to undergo, they seem to have a very extensive but confused idea of it; infomuch, that it was with difficulty, I could form any tolerable comprehension of their system. To the epochs of the world, whose continuation is very unequal, they give the universal name of *Galabp*, derived from the word *Gal*, fire, as most will end with fire. They reckon seven times seven epochs, which are thus to terminate. After every seven fiery epochs, one will follow ending with a flood, and after all these, one ending with a hurricane. All these small divisions of time are divided into four chief periods, called *Achu-Galap*, *Ebdereku-Galap*, *Choasim-Galap* and *Toktochu-Galap*. In the first division, or period, containing the time wherein the life of man, from an extent of 80,000 years decreases to ten years; are two epochs. In the second all mankind will die, for this reason, they call it *Ebdereku-Galap*, the destroying period; after this, a time will come, when the earth shall lie waste, and this is called *Choasim-Galap*, or the waste period, and then a storm or hurricane, shall bring departed souls from hell, which is the last period; but the time and place is not plainly ascertained.

I have mentioned the time when the Burchans or gods of the Kalmucks were raised from mortality.
They

They are so numerous, and they relate so much of each, as to fill whole folios; but their tales are so confused and the Kalmuck Clergy so ignorant, that it is difficult to make out the context, without translating and comparing many of their writings. So far it is certain, that these Burchans have originated from holy men, or men pretending to holiness, who have asserted that they passed through many bodies before they were regenerated, or from fabulous persons or deformed idols of some other more ancient religion. I could not absolutely find out whether, besides these Burchans, they admit of some higher supreme being, or, whether they account for the first operative principles in the manner of *Epicurus*; but, from what has been related, I should rather suppose the latter to be the case. Good and bad events are governed by Burchans, and good or malignant aerial spirits. There seems to be degrees of rank among their Burchans, at least they differ much from one another in power and occupation. I think they look upon Burchan *Abida*, as the most exalted of the whole, though the supposed founder of the superstitions of Lama, *Dshakshimuni* is more popularly worshipped and known. It's image is almost always seen among the Kalmuck idols.

It is remarkable that almost all their idols, except the *Dalai-Lama* and some other priestly-looking images, are represented as women, with the flaps of their ears long and pierced, having Indian ornaments, and their feet

feet turned underneath themselves, or else in a sitting posture ; yet, I saw some standing images with many arms and faces. The Kalmucks represent, also, their god of hell, or *Erlik-Chan*, as standing.

DELAI - LAMA.



Most of their idols are ornamented with a tippet, which is a badge of dignity worn by the priests of Lama ; some with the bell and sceptre, which the priest commonly holds in his hand or lays before him, during service. Propitious Burchans, seem to be painted with

with a certain sweetness and beauty of countenance, but the malignant ones, inspire fright and horror. I was lucky enough to meet with a great collection of these idols in Jaizkoi-Gorodok, which were cast hollow in brass, strongly gilt and so neatly executed as to equal, if not surpass, the engraved figures. The foot of each Burchan is made hollow, closed with a plate of copper and contains a little cylinder, made of ashes, wrapped up in a piece of paper, or the upper bast of the birch-tree, with a Tangutian inscription, or, at least, a ticket with such an inscription. These cylinders of ashes are, undoubtedly, considered as relics of the holy bodies which the Burchans once inhabited. I shall have occasion to mention, presently, that the ashes of such persons, as are supposed to be regenerated, are sent to the chief pontiff, or high-priest of this religion, at Thibet. It is also certain, that if once the cover of the foot of such an image is opened, the Kalmucks consider it as profaned, and it is no longer saleable. They purchase with avidity, and at high rates, from the Russian merchants, those Burchans which, at the destroying of the Sjungorian, or Dsungorian, power, became the plunder of the Kirguese, trucking with the Russians for other things; provided the foot of such idols has not been opened and the inner part has remained untouched.

Besides their idols cast in metal and silver, they have figures painted or drawn upon Chinese paper or stuffs,

stuffs, of which I have seen some very fine. I have met with some, also, impressed in clay, which had the appearance of *sigillata*, and were painted red or plated with gold. Such images they keep in copper-cases, in pyramids, made for that purpose.

I cannot speak more positively of the abodes of their burchans, than that they reside on the worlds and stars, or in other places of the celestial space of the Kalmuck-system. *Dschakshimmuni* is said to dwell upon earth. *Erlík-Khan*, has his place in hell, of which he is the mighty prince. Some have given them abodes in the uppermost parts of the firmament, to which there is a golden-road over a high mountain. At the top of this mountain rides a cloud, apparently made of jasper, on which resides the aerial spirit *Adabafchi*. At the bottom of this mountain are a great number of foxes, which attack the souls of the wicked, and thus detain them from the blessed abodes, which are the principal paradise. Underneath the golden-road is a silver-one, which leads eastward to that peculiar abode where *Abida-Burchan* enjoys a perfect rest. Next follows a copper-road, leading to the abodes of thirty-three propitious spirits, near which, is a place for the souls of children and those that have not been truly meritorious. At the lowest bottom of the mountain is an iron-path that leads to hell.

Before I proceed farther, I'll relate two instructive stories of the Kalmuck Mythology. They report of *Burchan Dschakdshimmuni*, that whilst his soul inhabited the body of a hare, seeing a man almost starved with hunger, he ran voluntarily into his hands, and, that the genius of the earth admired this noble act so much, that he placed the form of a hare in the moon, as a monument to after-ages; and the Kalmucks believe now they see a hare in the moon.

The other story is curious, and to the best of my recollection, there is a similar tale in the life of an Indian idol, told in the letters of a jesuit-missionary. I must observe first, that the Kalmucks imagine that there are always certain, evil spirits and agents of their gods of hell; hovering in the air. I mean the lower class of Kalmucks and their clergy; for there are, as in other countrys, Kalmuck-freethinkers, who laugh at such absurd stories. They believe, that a miraculous dragon, called *Luu-Chan* lives, during winter, in the water, and rises into the air in spring, when some of the infernal agents ride upon him. When it lightens, they suppose this dragon opens it's jaws, and when it thunders, that the deputy of hell is whipping him, till he roars again for pain. Once it happened, that as the three burchans *Mafsuschini*, *Dschakdshimmuni*, and *Maidarin*, were sitting together praying and in profound devotion with their eyes shut, according to the Kalmuck custom, a malignant spirit drew near, and let
fall

fall his excrements into the sacred bowl, which persons of sacerdotal dignity commonly have before them, when praying. As soon as these holy men saw this, they deliberated together how they should act. If they threw this venomous matter into the air, all beings there, they thought, would perish; but if they poured the infected bowl over the earth, every living creature would instantly be killed, they agreed therefore to swallow the contents themselves: *Mafsuschini* and *Maidarin* drank first, and as *Dschakdschimmuni* was to finish the bowl, the sediment was so thick as almost to strangle him, so that he looked blue in the face. For this reason, he is still represented in pictures with a blue face, but in cast figures, with a blue, lacquered cap.

I have, more than once, mentioned those aerial spirits which make the greatest figure in the fabulous doctrine of Lama, and observed that they were generally called *Tengri*. We may compare them to guardian saints and Roman-catholic angels. Some are propitious, others malignant spirits, and both are very much inferior to the burchans, neither are they supposed to be immortal. They are divided into various classes, some of which I am unacquainted with, and have stated abodes near and in the worlds, and in the great *vacuum*. They know the size of every one and how long each will live. Near our earth are four, such evil spirits called *Macharafa*, who are only 125 fathoms high. Above these, dwell the thirty-three spirits already mentioned, who are 150 fathoms in height, and one, among them,

called *Tejus-Bijas-Chubilgaksam*, is said to be taller still. Another fort called *Chublgaksam-Edlekschi*, are near three miles in height and live 10,206,000 years; there are some others 6,771,000 miles high, whose tedious, barbarian names I shall omit. A day to these spirits, is as fifty-years to men, and they live 500 years composed of such days. As wonderful as are the properties given them, so wonderful is their propagation; some generate only by kisses, embracing themselves, others by smiling at each other, by a wink and a glance, and some only by friendly looks. As far as I could learn, in conversation with some Kalmuck priests, they believe that all bad weather and unlucky events, among which are numbered the above-mentioned, bad epochs of the world, arise from malignant spirits, who nevertheless, must yield and submit to the power of Tangutian prayers and exorcisms. But the propitious spirits, whose faces are bright, and white as snow, and burchans are interested in the good of the world and mankind.

An essential, indeed the chief article, in the religion of Lama, and which must have the greatest influence upon morality, is their doctrine of the state of the soul after death, respecting hell and rewards. I collected many accounts on this subject, and shall communicate the most probable.

Hell is situated in the middle region between heaven and earth. Here the matter is very indefinite,
but

but the following is more circumstantial. In a large city, encompassed with white walls, wherein there is a continual beating of kettle-drums, the mighty burchan, *Erlik-Khan*, unlimited governor of hell and judge of departed souls, holds his residence in a spacious palace.

ERLIK-KHAN.



On one side of the city, is a large ocean of urine and excrement, which constitutes the first abode of the damned. Over this sea passes the above mentioned

iron-path, which has this admirable quality, that, if wicked souls, who have treated the principles of their religion, or the *Gurban Erdeni* * with contempt and have not respected the clergy, wander through it, the path underneath their feet will become so thin as to break under them and precipitate them into the place of punishment. Farther on is a sea of blood, in which many human heads are swimming. These are they, who, during their life, had sowed discord and occasioned blood-shed among friends and relations. Farther on still, is a remote, white land, where many of the damned endeavour to dig for water and food, without being able to find it, and whose hands and arms are so much wounded in digging, that they drop from their shoulders with exquisite pain, but grow again, to renew their torments. These are people who gave, whilst they lived, neither meat, drink nor cloathing to the priests. The other divisions of hell, which are, in number, eighteen, are situated round the palace of *Erlik-Khan*. In every division, the wretched souls suffer a degree of punishment proportioned to their offences, each division having an infernal, (*Efed*) and devils to torment the damned. Their devils are represented with all sorts of frightful forms, black, with the heads

* *Gurban-Erdeni* frequently occurs in books of the religion of Lama, and means literally the holy Trinity, but they mean by it, the three principles of their religion, namely Lama, the burchans and pure faith.

of goats,, lions and unicorns. In one division of this place, many run about without feet, for having despised the doctrines of the priest-hood. In another are sitting those rich persons who, though living in abundance, never administered to the wants of the poor. These are in an un-heard-of condition; are transformed into monsters whose heads and bodies are each as big as a mountain, and their neck as small as a thread. In other places, dreadful pits of unremitted yells, the cruel are tormented, those who have either killed their parent, elders or other men, cattle or even insects; for, according to the tenets of Lamaism, it is sinful to kill, purposely, even the smallest vermin that infect and plague mankind, and they are of opinion, that the souls of all animals, so destroyed, will, when in transmigration they inherit other bodies, seek revenge. In other divisions, are multitudes of mockers of religion, whose ears some little devils are alway filling with burning foot, that, eager as they may be, they may not hear each other. Wretches, who have robbed the the sacred shrines of burchans, burnt spiritual books, or have proudly lived, are, in a particular place, thrown into boiling caldrons filled with serpents. In other places, the damned are continually roasting upon gridirons, or spitted with a lance. There is, also, a place where there are one hundred and eight hooks fastened in a cloud of ordure, on which finners are hung, and when the wind blows them down, they fall on sharp points, which

lie underneath, and tear their bodies to pieces. Yet still a voice is heard, that calls them back to life, and their punishment continues some hundred millions of years, constantly torn to pieces, and their limbs beat and pounded in mortars. There are, also, dark, yet red-hot, infernal dungeons, and here and there a cold hell, where sinful men are frozen to death, before the rising of the sun, and are dragged about by furies till they are thawed to life again, in order to renew their torments. Farther on, is a place, where those who spent their life in dress and lived luxuriously are punished. A pack of little devils are here employed in forging curry-combs; and, when red-hot, tearing therewith the backs of sinners. Lastly, there is another place, where delinquents are squeezed between iron blocks, in form of mill-stones, and always brought back to life, to be squeezed to death again. There is a place where cattle, inhabited by human souls, have sinned, and also suffer the punishment of eating and drinking, without ever being satisfied. It is not to be wondered at, that they should fix an abode in hell for cattle, for, according to the Lama faith, they have the high prerogative of entering into the paradise of burchans and aerial spirits. But this well-policed hell, has no place of punishment for lust, which is very little thought of, wherever this religion prevails,

Great and holy Lamas, who have been zealous in their office and obtained a victory over all their passions, pass, when they die, by the aid of their prayers only, (of which the words *om ma wie pad, me chum* have the greatest influence), immediately into heaven, to the abode of the burchans, where they enjoy perfect rest with other godly souls, and exercise themselves in divine service, till the time of their regeneration comes.

Common souls, are received by the infernal agent, who brings them before *Erlik-Khan*, where they must account for their past actions and justify themselves: if they can do this, so as to leave no doubt of their righteousness, they are sent with honour to the blest abodes, he ordering a flying cloud, with a golden throne, to transport such a soul. Those who, living on earth, did much good and much evil, have a good burchan for their advocate, to plead their cause with the infernal deputy, *Erlik-Khan*, who orders the large book to be brought, where all the actions of men are registered, and examines it; and should the cause be doubtful, he takes a ballance, writes the good against the evil, and pronounces sentence accordingly; and the soul, so sentenced, is delivered to the burchans, or good, aerial spirits, or to the keeper of that division, where they are to suffer punishment; or they may, possibly, obtain a pass to the world again; for *Erlik-Khan*, has a power to send some departed souls
back

back to their bodies, and uses this means to preach repentance, through them, to the living part of men. And it is from these returned sinners, that they receive all their accounts of hell and a future life.

Infernal punishments, according to the opinion of Lamas, are not eternal. For each a time is fixed, but, by it's astonishing duration, it is almost equal to eternity. However, it often happens, that the omniscient burchan *Chomschin-Bodi-Sada*, who is represented nearly like *Dshakdschimmuni*, has mercy on departed souls, or that some holy, deceased Lama, being misled to hell, by mistake, shall, by some Tangutian prayers, release part of the tormented souls, and bring them back to happier abodes. But, it may be easily conceived that such as have offended, either the clergy or the burchans, cannot be partakers of this fortunate delivery, as their punishment is never to be shortened.

There are also some books wonderfully endowed with the power of freeing wicked souls from their merited punishment, provided they have, in the course of their lives, diligently read them, copied them or or carried them about with them. Among these, may be numbered, one containing certain unintelligible revelations, entitled the mystery of *Dshodbo*, the contents of which, I am unacquainted with; yet, I have had accounts of the miraculoufness of this book, in expelling

expelling diseases, lengthening of life, banishing malignant spirits and delivering sinners from the severest, infernal punishment.

It is evident, from the accounts here set forth, on which, perhaps, I have rather dwelt too long, and which contain all the principal points of the tedious religion of the Lamas, that, like other superstitions, they are the fabrick of priests, and illusions by which they contrive to awe the ignorant multitude. Thanks to superstition, so common to ignorant men, for the great success of the sacerdotal tribe, in establishing this religion, whereby they multiply their number, by encreasing the advantages of their clerical supremacy over the disciples of Lama, and enslave even nobles and princes !

The order of this idolatrous priesthood, which is honoured with the general title of *Churbrak*, cannot be better compared than to that of the Roman-catholicks. Their head, or *Delai-Lama*, may be considered as the Pope, except that his soul is continually wandering from one human body to another, and is deified. The residence of this famous man, whom the infatuated Kalmucks adore as a burchan, living upon earth, is called, by the vulgar, *Baraun-Tala* ; by others, *Pontal*, or, *Batalai-Lassau*. According to the reports of some Pilgrims, dispatched from the Kalmuck horde to this court, in matters of religious concern,
or

or who travel here by their own, holy zeal, the cloisters of Delai-Lama, into which no woman is suffered to enter, are situated on a high mountain, which has been dug through in such a manner, that a stream issues from it's centre. It is said to contain 700 pagod, or temples. The reader may form a better idea of the dress of the Delai-Lama from the representation in the plate, taken from a brazen figure of this burchan, than by any description I can give. The pointed cap is like a monk's hood, on the outer robe, and can be let down. The colour of this holy man's garment is always yellow, and they consider this, and red, as the most sacred of all colours.

This deity they suppose to be immortal, because the soul of the living Delai-Lama, when dead, passes into the body of his successor. Sometimes they have two of equal eminence and power, into both of whom the soul of the deceased Delai-Lama has passed. Hence arose the Chutuchta at the head of the Lamaism of China, and the Delai-Lama of Thibet. The Delai-Lama, which implies a deity at an immense distance, is honoured as a God, all his words are considered as oracles, he appoints the chief priests and nominates princes, he lives in a pagoda, on the mountain Potata under 29 deg. 6 min. N. latitude and 25 deg. 58 min. W. longitude from Peking, he eats no flesh, sits always cross-legged on an altar, answers questions, and blesses supplicants, ' His followers,'

‘lowers,’ says *Tooke*, ‘assert, that his soul, after the death of his body, passes into another human body, born exactly at that time, and this man is the new Delai-Lama; others say, that they keep a young man in the pagoda, during the life of the Delai-Lama, who is to succeed him.’

‘This religion seems not of very ancient date, it is a mixture of the superstition of the old Schamans with the christian religion, as taught by the Nestorians, the first Delai-Lama, being no other than *Prefter John*, the catholicus, or Nestorian patriarch, who travelled into this country to convert the savages. The Schaman religion is the oldest in India, the god of which, the Mongols call by the name *Dshakschimuni*, and can be no other than the well-known *Schaka* or *Schekia*, who was born 1017 years before our Saviour, and was called, after his apotheosis, *Fo*: as christianity then became more and more corrupted, it at last vanished away, and was here absorbed in the religion of Lama.’

Every prince has, in his horde, a Vice-Lama, subordinate to the Delai-Lama, and appointed by the court at Petersburg. This person performs in his district, what the Delai-Lama does over all the church. He ordains priests, forgives sins, bestows blessing and gives amulets to the dying.

Among

Among the Turgout Kalmucks is a Lama, or substitute of Delai-Lama, whose place is always filled by one of the present, highest order of the clergy. When the Sjungor ulusses arrived, they had also a Lama; but I could not learn, with certainty, whether there are two such patriarchs, at present, in this horde, now united under the Russian sceptre. The garments of these Lamas differ in nothing from the former, except that the upper-robe has sleeves, which they put on in cold weather. They are, also, considered by the silly Kalmucks as burchans, and are worshiped with outstretched arms as burchans are. The benediction a Lama gives, consists only in laying his hands upon the person he blesses; but I have seen many brazen images of Dalai-Lama himself, represented with that display of the hands wherewith the *Zordshi*, or Bishops, give their benediction.

The following is a representation of one.

The



The Lama has a ulufs to himself, consisting of one hundred tents of priests, and receives, besides an annual tribute, horses and camels from the lower clergy.

The higher order of the clergy, next the Lama, are the Zordihi, which may be translated Bishop. Their garments

garments used to be yellow or red, and they have sleeves in the under-garment; yet like the Lama, they wear the red order continually, and go like the latter, without breeches, that they may not defile themselves, by touching any part of their body, upon certain, necessary occasions.

Common priests, who compose the lower class of regular clergy, are called *Gellung*, and live dispersed throughout the whole horde; so that to every 150 or 200 tents, may be reckoned one who performs divine service for his aimak. A gellung has nothing to live on but the little presents his people make him on festival and prayer-days. These priests, and all those that belong to them, are exempt from secular offices, and import-duties. A gellung salutes his prince only by turning up his whiskers. Every gellung has many scholars, (*Mandschi*), whom he instructs in theology and the Tangutian language, and who sing with him in idol-worship, and learn to use the sacred instruments. He has, also, a deacon or assistant, called *Gadful*, to which office he may appoint any of his scholars, but a man cannot be ordained a priest, but by a particular form, and at the residence of the Lama,

They have another ecclesiastical officer, corresponding with our sexton or vestry-keeper. He attends only on the higher order of the clergy, and takes care of a magnificent tent, erected for the assembling of
the

the burchans. This lower order of priests, does not differ from the Kalmucks in dress, except that their heads are shaved all over, not wearing that tuft of hair behind, which the lay Kalmucks do. The heads of all their scholars are so shaven at their admission, and with a degree of ceremony. Neither have they any fringed appendage to their caps. Like the superior order of clergy, they take a vow of celibacy and continence, but a *Mandshi*, or scholar, before he is ordained, may, with special commission of his priest, quit the sacred profession and marry.

As divine service, among the Kalmucks, is performed throughout in the Tangutian language, every priest must, at least, be able to read it, and be provided with those prayers and songs, requisite for every hour and day and occasional solemnity; and in every priest's habitation is found a variety of Mongolian writings, in which are described the idolatrous ceremonies. Besides the offices used in sickness, funerals and the like, they have certain ceremonies of exorcism, called *Tarni*, by which they pretend to cure diseases. Medicine they know little of; their chief remedies are prayers and certain amulets. Each Kalmuck wears an amulet, hanging on his bare bosom, sewed up in a piece of leather, which he receives from his priest. I have seen large pieces of cotton-stuff, on which was printed all kind of insignificant, coloured figures, to each of which was added a Tangutian exorcism,

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with an inscription in Mongolian, for what purposes it it may be used. The prints that make these figures are kept by the priests.

No priest can be without the astrological books of of his religion, from which he ascertains auspicious days and hours for certain acts and events, which every Kalmuck applies to his priest for information in, before he undertakes any thing of consequence. It is confidently said, that the flight of a certain, white owl (*Strix nyctea*) which inhabits the steps, foretells good or ill fortune, according as it flies, to the right or left. If, when they see him, he directs his flight to the left, they endeavour to turn him to the right, and fancy this will give a change to fate.

The largest and most important book, in the possession of the Kalmuck priests, and which is said to contain an accurate and full account of their idols, is entitled *Bodimer*: but, I heard of an abridgment of the whole mythology of Lama, called *Ertjunzjun-Toali*.

The common priests, have their idols with them, in their tents, which are generally made of white felts, it being ordained, that a burchan shall inhabit no other; they are kept, with their religious books, in small trunks and are put under the bedsted; but the best burchans are set up in cases above. Before the
trunks

trunks, in which these idols are, stands a little table, or altar, on which are always eight or nine little, silver bowls, and a lamp or lanthorn. On the fire-hearth is another bowl made of iron, fastened on an iron bar stuck into the ground. Into this bowl, the gellung pours some drops of all the liquor he intends to use in sacrifice and never drinks any from any bowl, but his own, without pronouncing these words, *Om a chum*. That is 'may all be pure; God give abundance, and prosper this drink.' They have several other laconic forms of prayer. In this burchan's tent sleeps the gellung and his gadful, or some of his scholars.

The Kalmucks keep three days in each month sacred. As these days are regulated by the moon, and they begin the month with the new moon, their first, general supplication-day, is the eighth after the new moon; the second is on the fifteenth, and the third on the thirtieth. On such day no zealous Kalmuck eats or drinks any thing but what is made of milk, and spends best part of the day near the tent of his priest, to which they are called to worship in the morning, by the beating of a kettle-drum, and a kind of wooden or copper trumpet. None dare come near the tent, but the nobles and the learned. A multitude, of both sexes, sits round about, and drops from rosaries, which they hold in their hands, one bead after another, pronouncing at each, *Om ma wie pad, me chum*, with their

eyes shut, or rehearsing, with a low voice, another short form of prayer, which they have by heart, without knowing it's meaning. The more quiet the people are, the more noisy is the priest in worship, and, with his red robe and crown of roses, he cuts no small figure. Long strips of cotton, on which are written Tangutian prayers and fastened at the end of high poles, are stuck up before the tent, by way of flag; from an opinion, that the waving motion of such prayers in the wind, are as efficacious as a recital of them. (See a representation of a tomb so adorned in the plate Kalmucks). Before the burchans burns a light, and the above-mentioned little bowls are filled with dried meat, cheese or other victuals; there are also some large bowls filled with the same. They also lay down before the altar of the burchans, grits, milk &c. It is a crime among the Kalmucks, to pass by such a bowl, and I saw they were displeased with me, for so doing. Rich priests place small, frankincense candles upon their altars, before the burchans, but poor ones are content to strew, at the commencement of their prayers, which last the whole day, some frankincense on burning cowdung, supported by an iron trivet. On these days the burchans, in splendid dress, are exposed to the people, by placing them on the trunk before the altar, and some small rags of green, red, or yellow silk, are hung over their shoulders, by way of cloak; add to this, all the paper-paintings which the priest possesses, are hung up within the tent, as banners of their saints.

The

The priest himself, who performs the service of the gods, sits in his usual place bare-headed, his breast uncovered, the red, sacerdotal tippet over his shoulders, and a rosary about his neck. Before the priest stands a little bench, on which is another bowl with water, an elegant metal bell, with a handle, a small sceptre, which represents the bur-chans, and two plates; near it sit, or stand in a row, his gedful and his scholars, choristers, all bare-headed, with red bands over their shoulders. These bawl out the hymn as loud as possible, from written sheets before them, or play on instruments, to increase the noise of the singers. The instruments consist of great kettle-drums; a kind of hautboy, made of a human shin-bone, with a copper vent-hole and a mouth-piece which gives a shrilling sound; and an instrument in the form of plates, used by the Janissaries, which the priest himself, sometimes takes in hand. It may easily be conceived what an odious noise these must make, especially at the court of Lama, where there is a vast many of them, joined in chorus by a multitude of priests, holding their little bells in their left-hands and the sacerdotal sceptres between the two middle-fingers and thumb of the right-hand. I saw some metal bells used on similar occasion, the clappers of which were leather bags filled with sand, but which gave a strong sound. The Lama, is said to sit motionless surrounded by his bishops during the service. The bishops give the blessing, with such a gesture as is represented in the idol. See p. 263.

These noisy songs are, sometimes, interrupted by still prayers, muttered by the priest, with open, outstretched arms, closed eyes and frequent bowing. They have some variations in their ceremonies for public festivals, which are probably enjoined and for particular reasons, but to become acquainted with all the minutiae, would require the study of many years and a knowledge of the Tangutian and Mongol language.

The melody of these people, particularly their soft and tender music, has such a long-drawn, mournful tone, and, at the same time, so dissonant, that a good ear is nearly as much hurt with it, as with old French music. Besides the votive, amorous and plaintive songs produced every day by their poets, they have likewise a great number, recording the romantic achievements of their heroes, with monstrous, legendary songs of chivalry and acts of wizzard prowess; dragons with 10,000 heads and gigantic animals without a name; which they sing in a loud voice, with very little cadence, and frequently interrupted by a sudden, dead sound. The time is, now and then, varied, but they are chiefly a monotony, sung by rote and divided into strophés.

The following is an elegy, sung in the person of a new married woman to her husband.

Chafsa-

Chasaartæchæn chaarraani,
Chabschoolchodu jaachodok bui ?
Chairladak innakgien tellæædub
Sobochu du jaachodok bui ?
Damchan egæ schettekzæn darki tschin bæle bi ?
Damchan egæ innackliksæn innak tschinni bæle bi ?
Æmæeltæchan ræbrætschin atschekoni jaachodok bui ?
Æbærnænæ kekzen elædu sobochu duh jaachodok bui ?
Ittæm barridski, umschiksæn ittægællichtschin bæle bi ?
Innakladshi sannaksæn innaktschin bæle bi ?
Golduch tschin unguksen gollien chargæi ?
Uichan golschikladshi innaklaksæn innaktschin bæle bi ?

Thy well-bitted, jetty steed
 How didst thou ride in the battle ?
 In love with thy dearest mistress,
 How anxious wert thou for her ?
 Was I not the subject of thy prayers, without an
 (equal ?
 Was I not thy darling love without an equal ?
 How fared thy brown horse which thou ridest till he
 (was lean ?
 How wert thou humbled with once riding him ?
 True lovers we are, and will thou not hear me ?
 Was I not once thine only and best beloved ?
 At yonder river, the river of pines, thou wert brisk
 (and active !
 And did you not find me lovely and pliant ?

The following expresses the passion of a Kalmuck maiden, for her lover ; translated from their language.

As early in the matin, as the larks raise their notes,
 So early do I listen to their song ;
 And so early do I muse on my beloved.
 Ah Father, excelling at the bow ;
 Ah, Mother, of a temper most benign ;
 Can I only enjoy a lover in my thoughts ?
 The deepest thoughts are but deceitful ;
 Sensual perceptions alone are real.
 Let this my soul's darling be told to you.
 How powerful are the calls of nature !
 How unknown is the time of our meeting !

But to return to the Kalmuck religion. Besides the three days of supplication mentioned, the Kalmucks have three, great festivals, celebrated with all those amusements the reader will be more acquainted with. The first, and most important, is that on which they begin their new year. They call it *Zachan-Sara* (the white day), or *Chaburun-Turn-Sara* (the first day of spring) and it commences with the first new moon in April ; the next important begins with the first new moon in June, and is called *Sfaga-fsara* or *Suni-Turun-Sara*, (the beginning of summer). At this time, for a fortnight, the Kalmucks take as much flour to their priest as they can afford, of which they get round cakes made in the form of a cone. I saw, in the tents of
 some

some gellungs, brazen moulds of them, ornamented with some insignificant characters, and fastened on wooden-handles. When they are baked and have stood some time before the burchans, they are thrown into water. When a man is sick, even at other times of the year, he gets a figure made in dough, either a man, an ox, a dog, &c. agreeable to the advice of his gellung, or some holy book, which, having stood some time before the burchan, is to be thrown either into the fire or water, in order to appease the malignant spirit who has caused the sickness. These figures are called *Zaza*.

The third feast is in November, or begins with the new moon in December, and is called *Uwilin-Turun-Sara* (the commencement of winter) or *Sulain-Sara*, as they burn at this solemnity a kind of holy candles, brought from Thibet by the pilgrims, which candles they call *Sula*. I was not made acquainted with all the particular ceremonies, used at these feasts, but I will mention a few.

There is nothing more peculiar in the Kalmuck worship, than the use of a little vessel, similar to our coffee-pots, called *Bumba*, which on every day of public service, is wound round with a white band, ornamented with pheasants and peacocks feathers, and set upon the altar of the burchans near the lanthorn. This little pot is filled with sweet water, to which the Kalmucks attribute

attribute a miraculous virtue. On such feast and prayer-days, every faithful Kalmuck has a few drops of this water poured on the palm of his hand, which he devoutly and confidently licks up, as a preservative against many evils. Gellungs generally give a cup of this sweet water to the sick, and one, for a trifling piece of money, which I laid upon the altar, would fain have persuaded me to drink some of it, saying it would do me good. Every thing that is placed upon the altars is sacred, and must not be touched, especially on festivals. When I attempted to take hold of a burchan, to inspect it closer, the gellung spread his silk rag, in which he used to wrap up his idol, over my hands, and if he had either eat or drank, he would have washed his hands and turned up his beard, before he touched the burchan.

Still more remarkable are a sort of sacred pills, brought from Thibet. It is the noble only and the rich, who can obtain them from the priests, in cases of sickness, and when death seems almost unavoidable. They are taken to alienate the soul from this world and sanctify it. These pills are black and about the size of a pea. I thought they might have contained some opiate, but was told they were of a purgative kind.

At the tents of some old priests I saw a kind of prayer-wheel, representing a parti-coloured cylinder, with iron axles, containing written prayers; it is fixed on a
wooden

wooden frame, and turned quickly round with a string wound about it, each motion of a written prayer being considered as efficacious as a rehearsal of it.

Little, cylindrical boxes, or wheels, full of written prayers, wound round a stick, are distributed by priests to such enthusiastic persons, as through a holy rage have determined to go on some pilgrimage, or lead a holy and solitary life. Such hermits and pilgrims must not eat any thing but meat, grits or roots. After this pilgrimage, they conclude their life in sanctity, placing over their tents a blue flag, on which are written some Tangutian prayer, and as often as they mean to pray, they turn about their cylinder. After every turn of the wheel, they pronounce the six words, *om ma wie pad, me chum*.

It is also frequent among the Torgouts, that husbands, weary of life or crazed with holiness, shall forsake their wives, their children and estates, in order to be priests. In this case, they pass through a kind of noviceship, that is, their hair must be cut and they must be consecrated *gedfulls*. All the Dsjungorians I asked, told me, there was no such thing among them; but many of the Torgouts, with a holy zeal, assured me such an action was pleasing to God.

There are also among the Kalmucks, certain magicians or *Schamans*, not belonging to the priests or
holy

or holy people, but rather abhorred than revered; and their arts, which are prohibited, are often dreaded. These are men and women of the lower class of people. The former are called *Udugubn*, and the latter *Bob*. They exercise their sorcery once a month, the night when the moon is new. They steep a particular plant in a bowl of water, with which they first sprinkle their tents; next they take certain, dried roots in each hand, kindle them, and, with extended arms, make all kind of gestures and violent contortions of the body, repeating the following syllables, *Dsch Eje, Jo jo*, till they fall into an apparent phrenzy, when they begin to answer questions, respecting things lost and future events.

I shall now proceed to those profane customs, connected with their religion. When a woman is in labour, they send for a priest, who attends near the tent and reads some Tangutian prayers. During this time, and till the child is born, the husband of the woman is to spread a net round his tent, and continually fight the air with a cudgel, crying *Gart tschetkirr!* (avaunt devil!) in order to keep off the infernal agent. Among the rich, they place such a number of praying priests, on guard round the tent, as are sufficient to drive off the malignant spirits. During the birth, they have not only women but men-midwives, who take the child and wash it. The women are so strong that they are often seen to ride out the second day after

ter

ter they are brought to bed, and to follow their business; but, they cannot appear, otherwise than with their heads veiled, or be present at divine worship, till after forty days.

The common class of Kalmucks give their children the first remarkable name they hear, or the name of the first man, or animal, which the father meets after the birth. But the wealthy get the priest to study for a name from some holy book, which, if the father is not pleased with, he alters. When a boy has reached four years of age, he undergoes a kind of confirmation. He is brought before the gellung, who reads some prayers over him and cuts off some of his hair, which the mother is to pick carefully up and carry home, wrapt up with an amulet, hanging on her back. I could never find out the meaning of this ceremony.

Not having had an opportunity of being present at any of the marriages of the Kalmucks, I can speak only from hear-say. Many betroth their children, not only in their earliest infancy, but in the womb; this betrothing is, however, sacredly performed and conditional, that such a one has a boy and such a one a girl. The young couple are joined at fourteen years of age, or later. Two years before marriage, a bridegroom is allowed to take many little liberties with his bride, but should pregnancy happen before the day of marriage, an atonement is made to the bride's parents, by presents.

fents. Prior to the wedding, the bridegroom agrees with the girl's father, as to the portion he is to have with her, which consists in a certain number of horses and cattle; and the father of the young man, in return, presents the bride with a new, white felt-tent, some household furniture, bed-cloaths and ornamented feet pillows, covered with cotton or silk, and laced. The gellung is consulted, with respect to the day of marriage, and he searches, by astronomical calculations, for a propitious one. The new tent is then erected; the bride, with her parents and relations, goes to the bridegroom, who, with the gellung or priest, accompanies them to the tent, where he reads some few prayers and orders the bride's tresses to be undone and braided in the manner of married women, into two tails. He next takes the caps of the married couple, retires with them and his gadful without the tent, smokes them with frankincense, says a prayer, then returns to the couple, blesses them, gives the caps to some of the persons present, to put them on the bride and bridegroom's head, and the ceremony concludes with a feast. For a certain time the bride is not permitted to leave her tent, and no one is suffered to see her, but her mother and the married women of her acquaintance.

At the nuptials of princes, great entertainments are given. A large banquet is prepared, and those who carry the eatables to table, which are served up in large, wooden

wooden vessels, are preceded by a herald or carver, riding on a fox-coloured horse, splendidly dressed, having over his shoulders a long tippet of fine, white linen, and his cap trimmed with black fox or otter-fur. On the wedding-day, all the priests of the ulufs read prayers, and the day is concluded with a variety of amusements, as horse-racing, wrestling, shooting with the bow, &c.

The customary diversions of this careless and blithsome people, consist in horse-racing, in which the girls bear a part; shooting with the bow for wagers; wrestling, in which they strip themselves to their trowsers; (indeed, the men and boys, among the common people, in summer-time, go about naked, except a pair of trowsers); hearing the maidens sing; pantomimic dances, and music performed by the girls, who almost all of them play on the lute, the kit and the viol, a kind of hurdy-gurdy and the pipe. The subjects of their songs are the fabulous stories of gigantic chivalry, heroic tales, and amorous ditties; but their melody is harsh and dismal. The Kalmucks also play at chess, cards and tocadillo, much as we do.

The nobles eat upon a carpet spread on the ground. One cuts all the meat and the rest seize on it with their bare hands; when it is swallowed, they drink the liquor it was boiled in. It would seem that cleanliness with them was a sin, being forbidden to wash any vessel

fel in river-water, of course they wipe them only with a piece of old sheep-skin, on which they wipe their hands when dirty. As they dare not put any living creature to death, their habitations abound in all kinds of small vermin.

According to the principles of the Kalmuck religion, polygamy is prohibited, but this law is not so rigorously observed by nobles and commanders, who, sometimes, will have two or three wives. Such examples, however, rarely occur. Divorces are likewise unlawful, yet they happen frequently among their people of distinction. If a Kalmuck has any reason to be dissatisfied with his wife, or if she is herself desirous of a divorce, the husband has only to strip her of her cloaths and the divorce takes place; but he, sometimes, even whips her away. If he wishes to acquit himself honourably, he invites her relations to a banquet, gives his wife a saddle-horse and as much cattle as he pleases or can afford, and she quits him, with her friends, taking this property with her.

When a Kalmuck dies, the gellung is made acquainted with the moment in which the deceased gave up his spirit. He then judges in which of the twelve hours, wherein they divide their day and night, the deceased left the world and ordains accordingly, from a book, the manner in which the corpse is to be carried and to what district of heaven, and the relations
carry

carry it accordingly. There are six different modes of burial, one is to lay the corpse, naked, in the open step, with the head towards the east and the body in a sleeping position, supporting the head with the right arm. At the head, on both sides, and also at the feet, they stick poles into the ground, on the top of which are fastened square pieces of stuff, scribbled over full with Tangutian prayers, which resemble flags and are called prayer-flags. The second mode is to carry the corpse to some adjacent wood, dressed in the dress of the country. In both the above cases, the body is left to be devoured by wild beasts, by which process, they suppose the soul continues its transmigration. The third way is to throw the body into the water, this they do with children; the fourth, to bury it; the fifth, to cover it with a heap of stones; and, the sixth, to burn it. In the first five modes, in which they bury the common people and lower order of priests, they stick one flag as near the body as they can, burying with them the weapons of the deceased and some few presents. Besides these prayers of the dead, a kind of soul-mass is read by the priest for the deceased, by order of the parents, agreeable to the hour in which he gave up his spirit. These masses continue forty-nine days, at the expiration of which, three prayer-flags are given to the parents by the gellung, which they also stick near the corpse and then leave it to itself, without any farther notice. Some, however, will continue the masses a while longer. From the

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hour of departure, they judge whether the deceased was a good or a wicked man, and if the body remains unmolested by the beasts of the forest, they consider it as an ill omen.

Burning the dead, is only practised for the superior ranks of clergy or lamas, the nojons or princes, and a few holy people, whom they believe in the regeneration of. The ashes of such bodies are carefully collected, mixed with frankincense and sent to the Delai-Lama, at Thibet, who sends word back into which paradise the new-born soul is arrived through the fire, without being metamorphosed into an animal. In order to burn them, a vaulted oven is built with holes, in one of which the body, full-dressed, is laid upon a bench with three feet. The fire blazes out of the oven and is fed with the fat of the body till it is entirely consumed. The following mode of interring a Kalmuck lady, I learnt from one of their own people. Prince *Ondou*, who is still living, had a Truckmenian wife, who begged the favour, when dying, to be buried in the ground according to the custom of her ancestors. In conformity with her request, she was buried up to her shoulders, but over her bare head a felt-tent was erected, and the corpse so left.

August 12, 1769. Collecting these accounts and committing them to paper, detained me till the 12th of August, when, leaving all my heavy baggage behind

hind me, I left Jaizkoi-Gorodok for Gurjef, one of the most southern districts of the Russian empire, and abounding with natural curiosities,

It is remarkable, that as I travelled southward, I met, among the meadow-plants of the low-lands, several I had not seen before, and which are only to be looked for in the warmer districts of Europe and Asia. On so varied a scene, I could not but recollect the opinion of *Strahlenberg*, who, with great reason, considers the cross-mountains, which rise from the Glacial-sea to the farthest arms of the Ural, as the natural boundary between Europe and northern Asia. The step-mountains, as an immediate continuation of the decreasing and dividing Ural, which extends itself between the Jaik and the Samara, south-west towards the Wolga, naturally separate here the more northern districts, exhibiting a hilly and fertile land, overspread with European plants, from the Asiatic steps.

About five miles from Jaizkoi-Gorodok, is a very extensive and bushy valley, where, among other shrubs, I found the wild-rose, the false acacia and the greater meadow-sweet, which shot forth rods six feet long, and which, in this country, are used for switches, on account of their toughness and flexibility. This place abounded with the curious insect called the stinking beetle, (*tenebrio variabilis*) and a kind of earth-moss that covers the loamy surface of the step,

in whole tracts, as with a white-grey bark, which breaks where the ground is particularly dry. The Cossacks call it *Semljanoi chleb*, (earth-bread), and say that many a person, out a hunting, has lost his life, by being obliged to feed upon this moss. About the Jaik, they use it as a medicine, but here they are ignorant of its use.

Continuing my journey to the next guard-station, I there changed horses and had time to look about me, where I found the Awrag, a water-arm, full of all sorts of wild-fowl, and abounding with the bee-eater (*merops*). Water-tortoises are here uncommonly large, I saw one half an ell across the back, and this size is said to be the least. The common people believe that the bite of this animal is venomous, and that it generally bites people while bathing, in their private parts. It is often found caught in fishing nets and basket-work. I found here, also, a particular kind of shells, which grow together in bunches, and which, to my knowledge, are found no where but in the Wolga, the Jaik and the Caspian sea, (*Mytilus polymorphus*).

We saw now, for the first time, upon the Jaik, upwards of twenty of the spoon-bill (*pelecanus onocrotalus*), which the natives call *baba*, (old woman). They were very busy, fishing. It is well known, yet deserves to be repeated, that these enormous fowls assemble

ble in lakes and bays, form a long row, and spreading out their wings all at once, drive the fish together, which they swallow up in great quantities. Their time of fishing is about dawn and noon, and it is easily to be conceived how much a flock of such fowls will thin a water of fish. They weigh here from eighteen to twenty-five pounds each, measure from the point of the bill to the top of the tail about five feet, and from the extremity of one wing to the other, when spread, about nine feet and a half. If these fowls are disturbed, they soar high in the air, and fly in long, cross-waving lines; and, even when shot at, shew not the least confusion. From their whiteness they glitter as they fly, and though they live on fish their flesh is not indelicate. I enquired here about the wandering grass-hoppers, which are natives of the desarts of Asia, and was told that they did not come regularly every year, nor did they always make their way from the same quarter; sometimes they come from the Kirguisian, sometimes from the western, Kalmuck district, and sometimes from the north, up the river Jaik, and return the same way. They arrive in the time of hay-harvest, and destroy many a fine crop.

To the next guard-station, I rode all night, and it was very sultry, owing to the burning of a Kirguese step, which had continued ten days, and though very distant, had heated the air all round; before the moon rose, we saw the light of this fire at east, and, in the

day-time, it could be perceived by a column of smoke, on which seemed to rest an oblong cloud.

In this district, on a salt-step, especially where the liquorice grows, is found a useful plant, (*ferratula amara*), a kind of bitterwort, which contains so strong a bitter, that it is preferable in medicine to the centaury. The Cossacks assured me, that they had rapidly and radically cured cold fevers with it, and that it would cure in cattle the dangerous bites of badgers, wolves and mad dogs, by strewing it powdered upon the wound. *Buxbaum* seems to have described this plant by the name *gacea erecta, minor latioribus foliis*. As there is plenty of water-fowl in the river Jaik, the inhabitants are pestered with birds of prey; the common sea-eagle (*skopa*), the large, black eagle (*aquila ossifraga*) and another little species, with a spotted head, hitherto undescribed, (*aquila leucorypha*), have nests almost in every high tree.

About noon, on the 15th of August, I reached Kalmykowa, a fort or guard-station, at the distance of about 209 miles from Jaizkoi-Gorodok, where I staid a few days, to make some little excursions in the neighbourhood. Here have been found, in the Jaik, elephant and buffalo-skeletons, proofs of some old change in the globe, of which I shall speak further hereafter. They have preserved in Kalmykowa, a piece of elephant's tooth calcined, a monstrous elephant

phant hip-bone, which weighed fifty-four pounds, and the upper-part of an extraordinary, great buffalo's skull, with both horns, which measured, between the bottom-part of the horns, one foot three inches, Parisian measure.

On the steps here grow abundantly, the stinking ground-pine, (*camphorosma monspeliaca*), which had not the least smell, and some small pieces of wormwood, on which the numerous flocks of the Kirguese feed in winter; these plants continue green under the snow, which falls but lightly in this district and is soon gone. The sheep dig them readily from under the snow, and the Kirguese look out for winter-quarters, where this plant abounds; for the sheep will not touch it in summer. Here grows, also, the rhapontic, of which the Cossacks make an excellent medicine, by steeping it in baandy, to which it gives a pale, yellow colour. In Gurjes, they collect the young leaves in spring and eat them, as a cure for the scurvy, which there reigns. A decoction of it, is a wholesome purgative, and they apply it in a variety of disorders. The Kirguese use it to dye yellow with, and I am persuaded it would supersede the use of the foreign turmerick.

There is here, the scorpion-spider, (*phalangium araneoides*), known by all the Kalmucks, by the name of *bychorcho* or *mandschi-bychorcho*, and dreaded by them exceedingly, its bite not only occasioning extra-

ordinary pain, but a great tumour, which, though slow in operation, is certain death. This insect lives in holes under ground, but creeps about in the reeds and often awakes, with a bite, those imprudent people who lie down to sleep where they are. The Kalmucks and all those who have seen it alive say, that it will, in the twinkling of an eye, run up a stick, held before it, and bite the hand. It's common antidote and cure is sweet oil, but the Kalmucks use some superstitious remedies against it. They say, the wound should be first bathed with the milk of a young woman, suckling her first child, and who lived chaste before marriage; that then the heart and lungs of some black animal, either a dog, a sheep, &c. should be applied warm as taken from the body, to the wound. I saw an old Kalmuck, who had two marks on his breast, made by the bites of these animals, and who said, he was waked from his sleep by the violence of the pain. Nay, the Kalmucks dread this insect so much, that they will desert a district where they have seen them. I had once an opportunity of getting one from the cape of Good-Hope, but never knew it's violent effects till now. The Kalmucks say, that there is another such black insect, living under ground and spinning large and extensive webs, but I could never learn further particulars about it.

Upon the height of Kalmykowa, two good journeys on horseback from the Jaik, is an extensive salt-lake, forming

forming many little bays and marshes, but has no flux. It is called Kamysch-Samara. It's borders are full of bull-rushes, on whose roots the wild boars feed. On this lake are eight or ten floating islands, the texture of which is composed of all sorts of roots, rushes and willows, and inhabited by wild boars, swans and divers sorts of water-fowl.

August 17. I returned to the fort, and the next day took a ride to see the Kirguese, who were quartered in the neighbourhood, and, at sun-set, took notice of the race-hare, or flying-hare (*mus laculus*). This animal appears rather flying than running. The fleetest horses of our Cossack escort, could not keep up with them. With a single leap they will jump over twelve feet of ground, and they scarce touch the ground but we see them again in the air, till they rush into their holes.

Day was just declining, when we reached the Kirguese, who were quartered on a step or waste, under large, felt tents, on a delightful spot. The step-nations shew, commonly, a great deal of taste in choosing their abodes and in this respect, enjoy a pleasure that, in some measure, atones for their unsettled, vagrant way of life. These people seemed more alarmed at us, than we at them. We saw no one about the tents, but a few old women and some naked children, running about a kitchen-fire; the young women had absconded,

sconded, and the men were busy in collecting their dispersed flocks. As soon as their business was done, both masters and slaves gathered themselves about us, and finding us peaceably inclined and of an agreeable disposition, received us with a smiling countenance and treated us with a delicious, though sourish, drink, made of mares-milk*, and called by them, *kumys*, of which no one could drink a bottle without being intoxicated; a proof of this I saw in one of my attendants. Notwithstanding the good reception we met with and the hospitality they shewed, we did not think it proper to take up our night's lodging among them, therefore, about dusk, having inspected into what was most remarkable in their families, we took our leave and returned from whence we came; where, for the first time this year, I saw the unexpected comet, which the Cossacks, with their lynx eyes, had discovered three nights before, and on the 15th instant, (Aug. 1769), a little below the hyades.

** This drink, if prepared in clean vessels, as the Kirguese do it, is not in the least disagreeable, but has that vinous, sourish taste, which milk has, when turned to curds with cream of tartar. The kumys of cows-milk is much inferior to that made with the milk of mares; tho' when fresh, it is rather saltish, something like the milk of a cow, who has eaten some alkali or dame's violet, (al-laria).*

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As I owe my readers every account I could collect about the Kirguese, I now take the opportunity of relating to them all I could learn.

This nation of people calls itself *Kergis Chafak*, by which name it is known among the Russians and Kal-mucks. They, themselves, gave me the following account of their origin. They formerly lived among the Turks alone, and propagated and extended themselves as far as the river Euphrates, where they had their own particular governors; the last of whom, *Safyd-Khan*, had been in this district. This prince designed to make himself master of the Turkish throne, and, with this view, murdered two of Mahomet's cousins, by his daughter Fatima, called Chafan and Chuffan. I am not much versed in Turkish history, but was I ever so much, and whether the story be found true or false, I should relate it, as I heard it: it is a piece of Kirguisian antiquity. When the deed had transpired, the Turks rose in arms, and drove him and all the Kirguese from their settlements. After this, they sat down in the neighbourhood of the Nogayan Tartars, but having also fallen out with these people, they were again driven from the step or desert which they now occupy. This horde, afterwards, threw itself under the protection of Kergis-Khan, whose subjects were neighbours to the Sungarians and Chinese, (probably the Mongols), and this prince employed them in wars and military expeditions; but they

they forsook him also, and retired to their present abode, with the name of *Kergis-Chafak*, which implies a warrior of Kergis-Khan. They believe, indeed, that all the Russian Cossacks derive their name and military discipline from them.

These Kirguese, like all other Asiatic nomades, live in felt-tents, not at all different from those of the Kalmucks, but in being cleaner and so spacious that often above twenty persons may sit commodiously in such a tent. In hot weather, both Kirguese and Kalmucks remove the side-covering of the tent, in which situation it represents an alcove. The Kirguese, with respect to their persons and dress, are much cleaner than the Kalmucks. As they are mostly people of property, they keep a great quantity of cattle, live well, in their way, and are well attired. Whatever is requisite for their cloathing and consists of manufactured stuffs, they procure from Russian merchants, Asiatic caravans, or else by robbery, though, to do them justice, they become daily more and more honest, and trade now, by way of barter. The articles they make for themselves, are fur-dresses, leather, a kind of coarse camblet, felt-covers of sheeps' wool, which they neatly mix with wool of various colours, all sorts of leather and some trifling things. They chiefly tan their hides as do the Kalmucks, with sour milk, and this leather, so tanned, composes most of their mens' dress. In summer-time, they wear different kinds of
small,

small, upper garments, made of hides, the hair of which is outwards, and such a coat they call *jirgak*. Something more distinguishing, yet frequently worn, is what they call *daka*, which consists of the skins of unborn colts of different colours, so sown together that on the middle of the back and both shoulders, the manes fall as an ornament in the seams. Some, also, wear summer-cloaths of well-tanned goat skins, without the hair, these they call *kaskan* and are much worn by the Jaikian Cossacks, being soft and impenetrable by the rain. Their method of preparing them is as follows. Having cut off the hair from the skin, they moisten it with water and lay it, rolled up, in some warm spot, till it begins to be offensive and the hair loosens at the roots; they then scrape the skin with a blunt knife and afterwards dry it to a certain degree. If the skin be thin, they lay it in sweet milk; if thick, in sour or turned milk, tanning it therein for four days, but scraping it every day, in order to make it more supple. It is then dried in the shade and worked with the hands and feet till it becomes very soft. After this it is smoked, dried again and finally dyed with a yellow-brown colour, made from the roots of rhapontic, or the thrift (*Statice Tartarica*), called, by the Kal-mucks, *tuschutt*, and, by the Russians, *sheltoi koren*, that is, yellow-root, which are boiled in allum-water; some are said to mix a little sheep-fat among the boiling roots, in order to fix the colour faster. When the dye is cold, it is said to be of the consistency of a soft pulp,

pulp, which they spread over each side of the skin twice or more, letting them dry each time, and then work and render them soft again. Such skins may be washed very often, and not lose their pretty, yellow-brown colour. They use the same root for dying wool, but for a red colour they use genuine cochineal, which grows in some part of the step, in some low-lands, about the Jaik, and is called by them *kyfil-bujaf*. They have, among them, some few silver-smiths and black-smiths, but they are such inexpert workmen, as to be able to make only some, rough, trifling things. They are at a loss to conceive to what perfection those Europeans have arrived, who are able to manufacture needles and thimbles: all fine trifles of this denomination, are bartered for by them at Orenberg and some other places on the frontiers. Having no coin among them, they estimate every thing by the value of a horse or sheep, and their customary, small coin are wolveskins and lamb-skins.

The man's dress, besides the upper-garment, consists in a cotton under-one, and a shirt of blue linen or *kitaika*, which is open, like a bed-gown, from top to bottom, but lapped over before, and, with other cotton cloaths, tied fast about the body. They gird their upper-garments with a leather belt, on which hangs, usually, a vessel with gun-powder and a bag full of shot and balls, most of the Kirguese of property carrying fire-arms with them. Some make their own powder,

der, digging salt-petre from the old tumuli, and it is said to be so good, that they need only wash the ground from it and may then mix it with sulphur and coals. The sulphur, and indeed the chief of their gun-powder, they purchase from the Asiatic caravans.

The mens' summer-caps are commonly made of felt and covered with stuff. They are worked with the needle with threads of various colours, and lined with velvet. The top is conical, and the cap has two broad flaps that hang down on the cheeks, or turn back or up occasionally. Their winter-caps are lined with fur. Besides these, they wear, as do the Tartars, upon their shorn heads, for they shave their heads clean, leaving whiskers on the upper-lip and a pointed beard on the chin or at the corners of their mouths, a kind of black cap worked with various coloured needle-work. The boots which the rich wear, are made by the Bucharrians, and sold very dear. They are made of ass's skin, very clumsy, and after a peculiar model; the soles are full of large points, are encompassed with iron, and are generally so badly made, that no European would be able to walk in them, without falling down at every step. The Kirguese, however, seldom walk, but are almost always on horseback; so that most of them are bandy-legged and very bad walkers. They are of middling stature, rather handsome featured when young, but among the old, their faces are Jewish and frightful, and, owing to their indolence,
their

their bodies are thick. ‘ Being well clad,’ says *Tooke*,
 ‘ in furs and two or three garments at a time, they
 ‘ are seldom hurt by the frequent falls they get from
 ‘ their horses.’

‘ The trappings of their fine horses employ their
 ‘ thoughts almost as much as that of their persons;
 ‘ having always elegant saddles, handsome housings
 ‘ and ornamented bridles. They are generally armed
 ‘ when on horseback, and carry a short, twisted whip,
 ‘ about an inch thick, like that of an English postili-
 ‘ on. When they go a hunting, they wear *schalvars*,
 ‘ or long trowsers, which reach up to the arm-pits,
 ‘ into which they cram all their cloaths; and a Kir-
 ‘ guese, in this dress, may be taken, at a distance, for
 ‘ a monstrous pair of breeches on horseback.’

The common dress of the women, is a blue shift, not open before, which is the only covering they wear at home, a pair of long breeches, bands, with which they wrap up their feet and legs, flat-bottomed socks, and a white or parti-coloured piece of linen, with which they veil their heads. The following is their usual head-dress, which they call *dsbaulok*. They first lay a kind of stuff, three or four ells in length, over the head, bringing the ends of it down the sides of the face, about which they braid their hair in two tresses. The ends of this stuff they cross under the chin and carry them up over the head again, so that the ends
 hang

hang down on the ears on each side. This put on, they wind a slip of some stuff, four or five ells long and about two hands broad in the middle, round the head, so as to form a kind of cylindrical turban. When they are better dressed, this *dshaulok* is of finer stuff, and striped; over the blue shift, they wear another of silk or some rich, Bucharian stuff, ornamented with artificial flowers; they next put on a tippet of the same colour as the *dshaulok*, about the shoulders, and, over the whole, a wide Bucharian bed-gown, or *chalat*. They carefully cover their bosom with a thick handkerchief, worked with the needle in various colours, within their under-shift. They have, also, another ornamental dress, called *dshadshbau*, consisting of a full and long train, or tail, fastened to the hind part of the head, under the *dshaulok*. Above this flows to half way the leg a double tail, the size of a man's thumb, covered with velvet and ornamented at the end with a thick fringe of black silk. Married women divide this tail, bringing it over the shoulders on each side, but girls suffer it to hang down the back. Round this tail hangs, down to the knee, a kind of string, with all sorts of varicoloured fringes, corals, beads and other things which make a jingling noise. They also wear a cap under the *dshaulok*, which, round the face, is ornamented and hung full with little, silver coins or medals. ‘Sultanas or princesses,’ says *Tooke*, ‘and daughters of illustrious persons, distinguish themselves by the necks of the heron put into

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‘ the hair, raised into an ornament upon the head, in
‘ the shape of a horn, and the plumage is very beauti-
‘ ful. These, also, wear silk cloaths, or rich stuffs,
‘ or fine cloth set off with gold lace and loops, or
‘ faced with fur; and even velvets are very common
‘ with this class of ladies.’

The Kirguese are Mahomedans, which religion, they say, they brought with them from Turkestan; they, therefore, take as many wives as they can rob or pay for; ‘ and many,’ says *Tooke*, ‘ keep concubines, who are treated, in every respect, like wives, their children also, being reputed legitimate. The moderate price for a marriageable girl, to be taken as a first wife, is about fifty horses, twenty or twenty-five cows, a hundred sheep, a few camels, or else a slave, with a cuirass, or coat of mail. The poorer sort find wives at a cheaper rate, and the rich pay much dearer. The second wife of a married man costs much more than the first, the third and following still more. Common people, of course, are obliged to be contented with one wife, and think themselves very well off, if they can get that one, as they are often under the necessity of stealing her from some of the neighbouring nations. The Kalmuck women are the most sought after by the Kirguese, conceiving that nature has endowed them with singular advantages for pleasure, and that they preserve the marks of youth longer than the women of other nations;

‘ nations; insomuch that the rich, are very willing to
‘ marry them, if they can be prevailed on to embrace
‘ Mahomedanism; on the contrary, they hold the
‘ Persian women in so little estimation, that they give
‘ such as they take in marriage to their slaves. The
‘ espousals consist in a public declaration of the agree-
‘ ment made between the contracting parties and then
‘ a priest repeats a prayer. The evening before a wo-
‘ man is sent for to shave off all her hair but that of
‘ her head, and on the day of marriage she is carried
‘ in a carpet to the bridegroom’s tent, and the wedding
‘ celebrated in a hut built on purpose by the bride’s
‘ father. Previous to consummation also, the girl is
‘ carried about on a carpet to her companions, to take
‘ leave of them, in which ceremony, she is attended
‘ by several others singing all the way. If, unfortu-
‘ nately, it is discovered that she was not a maid
‘ when married, the guests, the day after, kill the
‘ bridegroom’s saddle-horse, tear his wedding-gar-
‘ ment in pieces and ill-treat the bride. In this case,
‘ the father-in-law is obliged to give satisfaction to the
‘ offended husband; but, on the contrary, if all is
‘ right, the rejoicings continue for several days, no-
‘ thing is thought of but eating and drinking, danc-
‘ ing, singing, chatting, wrestling, horse-racing and
‘ shooting at a mark. At the two last-mentioned di-
‘ versions, considerable bets are made, and the new-
‘ married couple give prizes to the conquerors, of
‘ shewy apparel, trinkets and sometimes horses. On

U 2

‘ breaking

‘ breaking up the festivities, the guests make presents
‘ of cattle and other things to the married pair.’

‘ Such as have more than one wife, give each a se-
‘ parate *jourt*, or tent, where she brings up her chil-
‘ dren after her own liking. The more children they
‘ have, the happier they esteem themselves, and are
‘ the more honoured by their husbands; whilst such
‘ as prove barren, are so little thought of, that the
‘ husband often makes them the servants of those who
‘ encrease his family. The rich and great give pom-
‘ pous names to their children; such as *Nour Hali*, or
‘ the great light; *Ir Hali*, or *Erali*, the exalted man;
‘ *Dost Hali*, the powerful friend; *Batyr* or *Bagatyr*, the
‘ hero; *Temir Ir*, the man of iron; *Beg-Hali*, the pow-
‘ erful prince, &c.’

According to Mahomedan custom, it is difficult to see their women; the richer Kirguese have a separate tent for their wives and one for themselves. They are zealous enough in their faith, yet very ignorant, having but few Mahomedan priests among them. Their horde, however, has now an achan or chief priest, who generally goes about with the khan.

In their way of living, they observe strictly the law of Mahomet, of course, they eat no impure cattle. Of wild animals they eat only the antelope, the step-horse and the different kinds of deer. This meat com-
poses

poses their chief food, though they, now, accustom themselves to food made of flour and groats, which they procure from the Russians by barta. In eating such things, they mix them with four milk or the spirituous extraction from mares milk, called *kumys*.

Tooke, who frequently speaks from the authority of *Gmelin*, who travelled into Siberia some years before *Dr. Pallas*, and as such, I shall often quote him, says, ' that mutton is their ordinary winter-food, and they ' will live on it for many months together. At times, ' they will eat other food, but it is only at occasional ' festivals and for the sake of variety. In winter, they ' drink broth, to quench their thirst, and from the ' quantity of boiled meat they use, have plenty ' of this liquor; they are fond of fat, regaling themselves often on suet or butter, which they eat without ' bread or any dressing. They are, in general, extravagant eaters, or, more properly, *devourers*; four ' men, returned from hunting, often consuming, at one ' meal, a whole sheep and leaving nothing but the ' bones.'

' They smoke tobacco to excess, as do all the Tartars. Men, women and children, all smoke and take ' snuff, which latter, they keep in little horns, fastened to their girdle. Excepting *kumys* and arrack, ' they have no inebriating liquor; for this reason, they ' smoke till they grow giddy, swallowing the smoke,

‘ that they may attain that end the sooner. They use
‘ Chinese pipes when they can get them, but at other
‘ times, and for common use, have a contrivance of
‘ their own; they take the *tibia* or leg-bone of a sheep,
‘ and cutting off the knob at one end, take out the
‘ marrow, and make a hole in the side at the other
‘ end, near the knob, like to that which the lips are
‘ applied to in a german flute. When they would
‘ smoke, they introduce a wad of wool into the tube
‘ and thrust it up to the above-mentioned hole; the
‘ design of this is, to prevent the tobacco, with which
‘ the tube is filled, from choaking up the hole, which
‘ is the mouth-piece to this extraordinary pipe. At
‘ the end, where the knob was cut off, they light the
‘ tobacco with touchwood, drawing the smoke into
‘ their mouths, by the little lateral hole through the
‘ wool, and they suck with so much force, that a great
‘ quantity of smoke comes out at their nostrils: the rest
‘ they swallow. Each person takes three or four whiffs
‘ of this kind, and then passes the pipe to his next
‘ neighbour, who does the same and sends it round;
‘ but they have an invention still more ingenious for a
‘ smoking party. Having found a place convenient
‘ for lying down upon the ground, one of the compa-
‘ ny makes water in the centre of this spot, to settle
‘ the earth and make it soft and fit to receive a hole,
‘ which they make with the handle of a whip; in this
‘ hole they put the tobacco, lighting it with touch-
‘ wood, and lying all round it flat on their bellies;
‘ every

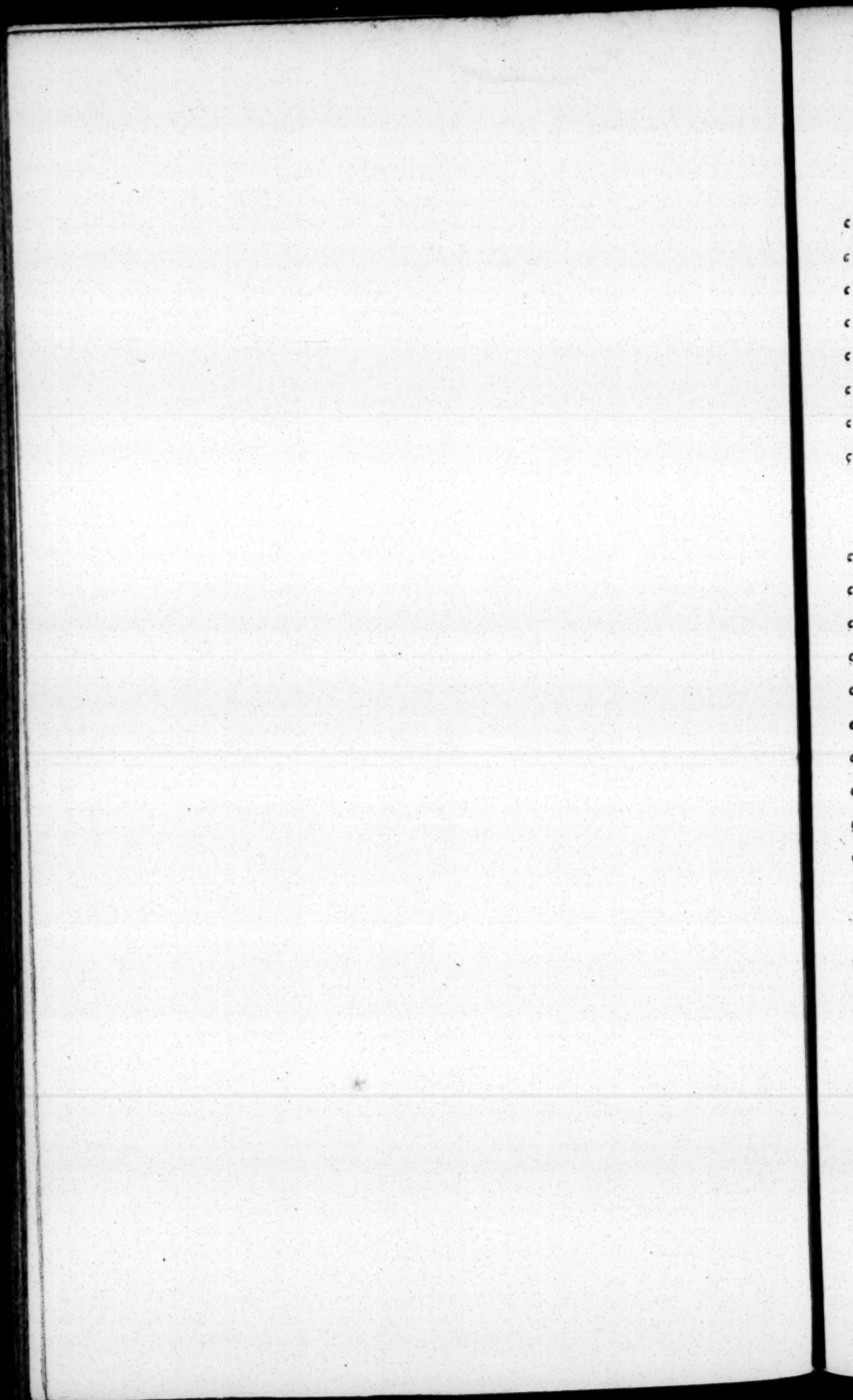


A KALMUCK SMOKING PARTY.

Thornburck sculp.

Published as the Act directs by C.D. & T. Truett, Octo. 1788.

Burney del.



‘ every smoker then thrusts, obliquely, a hollow cabbage-stalk into the moistened earth, in such a manner, that the extremity may touch the tobacco at the bottom of the hole, and in this attitude they smoke at their ease, without any inconvenience to each other. By this means, all their heads are in a cloud of tobacco-smoke, which; to them, is a great luxury and intoxicates them all in a short time.’

‘ The habitations of the Kirguese are portable tents, made of felt, like those of the Kalmucks, only larger and more neat; the fire is made in the centre, directly under the opening left in the roof. Round the fire, they spread pieces of felt, Persian carpets, or fur-cushions. The wealthy, have the inside of their tents hung with different coloured stuffs, and not unfrequently with silk. The leather bottles and the several chests and boxes, are ranged round the side of the tent, and their arms, saddles, bridles, bed-cloaths, &c. hung up over them.’

‘ As the *Aimaks*, or principal families of this nation, love to keep together, their camps contain a great number of huts or tents and consequently take up a large space of ground. The residence of the khan is surrounded by near a thousand tents; but, on the other hand, one may travel fifty or sixty miles, without seeing a single habitation. They are commonly changing their situation, both in summer and winter,

- ‘ for the sake of pasturage; but, the aimaks first agree
- ‘ with one another not to settle too near together.
- ‘ Their tents are very cold in winter, as their fire consists of nothing but the dung of cattle, dried.’

The rarer priests are among the Kirguese, the more numerous are the forcerers. They have, as I learnt, five different sorts, one sort prophesies from books and from the stars, which they do in a scientific way, without any private shew of pecuniary motives; these are called *Faltscha*. There is, also, a sort of fortune-tellers among them, called *Jauruntschi*, who, from the shoulder-blade of a sheep, foretell future events and answer all questions. They say, this shoulder-blade should be cleared from the skin and flesh, not with the teeth, but with the mouth, otherwise it is unfit for the black-art. When a question is put to one of these fortune-tellers, he directs his mind to some thought and lays the blade-bone on the fire, till the flat-side gets several rents and chops with the heat, and foretells from the marks and lines so left. They are said to be able to tell at what distance an absent person is. They tell you, that a party of Kalmucks, who had once such a fortune-teller among them, committed a considerable robbery on the Kirguese, and that a party of the latter, who had also a fortune-teller among them too, was exhorted by him to pursue the enemy; but the Kalmuck fortune-teller was so experienced in his art, that he gave seasonable notice to his countrymen of the approach

approach of the Kirguese, and urged them to fly. When the Kirguisian fortune-teller thus found he could not compass his design, he is said to have made use of the following stratagem. He ordered his party to saddle their horses, with the front of the saddle backwards, and set on them in this manner with their backs to the horses heads; by this means, the Kalmucks were lead into an error, for their fortune-teller advised them to go on steadily and gently, as there was no danger, the Kirguese having their backs turned towards them. Thus were they overtaken by the Kirguese and made prisoners. I heard this tale from a Kirguese himself, but am not accountable for it's credibility.

A third kind of forcerers is called *Bakscha*, and great confidence is placed in them. When their advice is asked, they demand a selected horse, sheep or buck, as a sacrificial victim. The bakscha then begins his magic hymns and to beat (as do the Laplanders) a kind of magic drum (*kobig*) hung with glingling rings, jumping and making many violent motions with his body, for half an hour. He then orders the victim to be brought forth and slain, catches the blood in a particular vessel, takes the skin for himself, and, the flesh being eaten by those who are present, gathers the bones, paints them red and blue, and throws them from him towards the west, where he also pours the blood of the animal. After this, he jumps about again, for some time longer, and then gives the desired answer.

Another

Another kind of magicians, *Ramtscha*, are those who pour fat or butter in the fire and prophesy by the colour of the flame. On such occasions, they also immolate a victim and make use of conjurations: but this sort of witchcraft is in very little repute. There are, likewise, wizzards and witches (*Dshaadugar*) who enchant the slaves and prisoners, so that they commonly lose their way, upon their flight, and fall into the hands of their proprietors again; or, if they should escape, fall, soon after, into Kirguisian slavery. These pull out some of the hair from the captiv's head, ask his name and set him in the middle of a tent over the out-spread cinders of the hearth, which are strewed with salt. This done, the witch begins her spell, during which, the prisoner is thrice to go backwards; the witch then spits on each of his foot-steps and, every time, runs out at the door; at last, she strews a little of the ashes, on which the prisoner stands, upon his tongue, and thus ends the enchantment. The Jaiki-an Cossacks firmly believe, that, if a prisoner tells his true name, the witchcraft takes an infallible effect.

The numerous Kirguese live far more unconstrained than the Kalmucks, who acknowledge so many little despots among them. Every Kirguese lives like a free lord, and, on this account, they are less dangerous as foes; yet, every aimak, or family, has it's chief, to whom all the relations and dependants pay a voluntary obedience. Those who have most subjects and dependants,
take

take the title of Khans and Sultans. They have, also, other degrees of rank. Certain nobles they call *Bu*, some other honourable persons of ancient extraction, *Chodsha*, and some others, *Murjes*. The khan, elected and placed over a small Kirguisian horde, has but little power, unless he can acquire it by his wealth and liberality. It is not he that can decide disputes and contentions among his people, these are determined by a certain, annual assembly of the elders and chiefs of families. If they divide into parties or are threatened by some war, they call together a democratic council and elect one of the elders or chiefs, for their general. ‘The great and wealthy,’ says *Tooke*, ‘live perfectly in the same manner as the rest of the people and are remarkable only for the numerous train, that accompanies them in their cavalcades, and the quantity of huts which surround their quarters, inhabited by their wives, their children or their slaves. The great men treat the common people as brethren, and as all the Kirguese are equally free, these latter shew no great marks of respect to them; since every one, immediately on becoming rich, is as great as the best of them. In all the tents, the common people place themselves by the side of the nobles, without the least ceremony, eat with them, and say what they please before them. When a superior bids them do any thing, they execute his orders, if they like those orders. Although the commands of the Khan are not executed with the most scrupulous exactness, they treat

• treat him with the profoundest veneration, looking
• on his person as sacred. *Nour Hali*, the reigning
• khan of one of the hordes, is confirmed in his so-
• vereignty by the court of Petersburg; he is an equi-
• table, discreet prince and strictly devoted to Russia.
• His property consists in about a thousand horses,
• four hundred cows, two hundred camels, four thou-
• sand sheep and several hundred goats, so that in re-
• spect to riches alone he holds a rank but little distin-
• guished, and as he is obliged to form *tabounes*, or
• herds of cattle for a number of princes, to enable
• them to make some figure, and his numerous family
• and slaves, and the frequent visits he receives, occasi-
• ons a great consumption of cattle, and as he enjoys
• no revenue at all, it will be ever impossible for him to
• amass a large fortune; notwithstanding this, he
• makes a much greater figure than any one of his
• horde, and the presents he obtains from the court of
• Russia contribute greatly to the support of his dig-
• nity. His residence is composed of a vast number of
• huts; those of state are very richly adorned. His
• family, as well as himself, are always dressed in cloth
• of gold or silver, or velvets, and his person is con-
• stantly surrounded by the elders of the nation. The
• title of the khan is *Taghsir Ghanim*, or *Taghsir Pad-*
• *schäim*; his wives are called simply *Ghanim*; the
• princes, his sons, bear the title of *Taghsir Saltan*, and
• the princesses that of *Ghanim Käi*, daughters of the
• khan. The present khan has four wives and eight
• concubines;

‘ concubines; the former are sprung from rich and
‘ ancient families of the Kirguese, but the concubines
‘ are either taken from the common people or slaves,
‘ bought from the Kalmucks, on account of their
‘ beauty. *Beg Hali*, one of his sons, is khan of the
‘ Aïraklian Troughmenians, and *Saltan Pri Hali*, an-
‘ other of them, is chief of the other Troughmenians;
‘ excepting the two youngest, all the princes are mar-
‘ ried to daughters of the principal Kirguese, being
‘ already in the rank of elders, in the different ulusses
‘ of both hordes, a uluss being a society of several fa-
‘ milies, who keep carefully together for the sake of
‘ preserving their descent pure and unmixed. These
‘ alliances and the dignities of his sons, contribute
‘ much to the power of *Nour Hali*. As the princesses,
‘ by the laws of the koran are forbidden to marry any
‘ relation, they are all yet single, and some of them
‘ begin to grow old, yet the khan, through pride, will
‘ not dispose of them, at even a handsome price to any
‘ suitor that is not descended of illustrious blood. The
‘ people are not permitted to see the wives and daugh-
‘ ters of their khan; they never appear in public but
‘ when changing their residence, and then they go on
‘ horses and camels, in their richest dress and orna-
‘ ments. Whenever a Kirguese, on horseback, hap-
‘ pens to meet the khan in the step or desert, he dis-
‘ mounts, and advancing in an oblique direction to-
‘ wards him, says aloud *Alla arbaschou!* i. e. God
‘ give thee prosperity! After this salutation, the khan
‘ strikes

‘ strikes him gently on the shoulder with his hand or
‘ whip, and this passes for a sort of benediction’.

‘ Though they are forbidden to steal, or carry off
‘ men or cattle, they are so far from thinking these
‘ depredations shameful in any way, that they glory in
‘ them, boasting to one another of the exploit and the
‘ extraordinary adventures accompanying it, as if it
‘ were some courageous act of heroism, or some ho-
‘ nourable and glorious feat of chivalry. The cir-
‘ cumjacent nations are most frequently exposed to
‘ their incursions, but the Kalmucks are their most
‘ favourite objects, though the risk is the greatest: as
‘ for the Russians, they are seldom molested.’

They commit their petty robberies in small gangs, and if, upon the Russian frontiers, they drive away a flock of horses and seize some single men and women, it is commonly about the time when they quit that district with their flocks; for as long as they feed their cattle in their vicinity, they take care that no disorders are committed, least the innocent and guiltless, who cannot get off as expeditiously with their flocks, should suffer for the misdemeanours of the perpetrators. They commonly suit their periods of robbing so well, as never to be caught. It has been remarked, that their neighbourhood is most dangerous in those places where the step, on the Russian frontiers, is flat and open; not in their mountainous and woody steps, where they
conceal

conceal themselves and lie in wait for opportunities. The Asiatic caravans who pass through the insecure steps, inhabited by these plunderers, to the Russian trading towns, gain over the aimaks of the district they pass through, to their favour, by presents of goods; in which case they appoint them an escort, for which they are paid from ten to twelve rubles, or about forty-eight shillings English, per camel.

‘ Besides the captures,’ says *Tooke*, ‘ which accident throws in their way, they go out sometimes singly in search of adventures, and at other times in small parties, having at their head, but too often, some great lord of their nation. When they have a mind to pillage any caravan, in their own territories or beyond them, several ulusses join together for that purpose, entering into negotiations and making conventions in form, that they may be more certain of the predatory project. In this sort of skirmish, it often happens, that a great number of the Kirguese are made prisoners and carried away captive by the caravans, and if any are killed in the fight, not the smallest enquiry is ever made of what is become of them. In trifling seizures, every one keeps what he gets, but considerable and important spoils are divided, according to previous contract, or as the exigencies of the case may require. Each adventurer keeps the cattle that fall to his share and, generally, the women he has taken, as the buying off a woman
‘ does

‘ does great honour to the ravisher. They yield up
‘ the slaves and merchandize to the more wealthy,
‘ who give them cattle in exchange. It is no uncom-
‘ mon thing to sell their slaves to a neighbouring nati-
‘ on, especially if these slaves are Russians, for as they
‘ are known to be laborious and accustomed to agri-
‘ culture, they fetch a great price, and it is the inte-
‘ rest of the Kirguese to get rid of them as soon as
‘ possible, knowing what they are to expect, if
‘ any Russians are found among their captives’.

‘ The court of Russia has taken various measures to
‘ put a check to these terrible disorders. A line of in-
‘ trenchments and redoubts has been built along their
‘ frontiers. Wherever the river does not prevent
‘ their excursions, they fix a number of sticks, with
‘ both ends in the earth, bent in the same manner
‘ as those in some countries for catching thrushes;
‘ these sticks, or wands, are placed from one redoubt to
‘ another, so that the patrol can see, at once, by
‘ such as are wanting or deranged, whether any Kir-
‘ guese, (who come always on horseback), have passed
‘ the frontiers, and, on such discovery, mount and
‘ pursue them immediately. The Russian shepherds
‘ are armed and always on horseback, to be on their
‘ guard and defend themselves, when necessary. If,
‘ notwithstanding all these precautions, a robbery is
‘ committed, or a caravan bound to Russia is pil-
‘ laged on the desert of the Kirguese, the Russian
‘ commandants

‘ commandants demand restitution from the khan; and
 ‘ if neither he nor the lords of the nation, can bring
 ‘ the people to consent to it, a troop of Baschirians is
 ‘ dispatched immediately into the horde, and the first
 ‘ Kirguisian ulufs they come to, is obliged to conduct
 ‘ them to that which committed the robbery, or be
 ‘ answerable for the damage. The Baschirians then
 ‘ take with them a certain number of Kirguese and
 ‘ cattle, and bring them to Orenberg, where they are
 ‘ detained, till a state of the loss can be ascertained.
 ‘ This being done, the overplus is sent back again, as
 ‘ soon as the Russian prisoners, taken in the engage-
 ‘ ment, are restored. When any single robbers are
 ‘ caught, or a small party together, they are first
 ‘ punished and then shut up in *Ostrogs* of the fortresses,
 ‘ where prisoners condemned to public works are con-
 ‘ fined.’

Was it not for their depredations, the Kirguese,
 would not be so formidable. So little sanguinary are
 they, that they would rather make a slave of a man
 than put him to death. Whilst their slaves are faithful,
 they never treat them cruelly. ‘ As they are all passi-
 ‘ onately fond,’ continues *Tooke*, ‘ of uncontrouled
 ‘ liberty, and as every man can acquire a stock suffi-
 ‘ ent for his own support, not one of them can bear
 ‘ the idea of being a servant to any of his countrymen;
 ‘ they are all brethren and have the resolution to pre-
 ‘ serve their condition as such, which is the reason that
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‘ the rich are obliged to have *yafowres*, or slaves, from
‘ other nations. The more of these a Kirguisian lord
‘ possesses, the greater figure he makes, and the more
‘ care is taken of his flocks. Even the courtiers and
‘ domestics of the great are all slaves; the khan keeps
‘ about fifty. Slavery, among this people, is no great
‘ hardship, to such as are once accustomed to their
‘ way of life; for the masters treat their slaves as if
‘ they were their relations, supplying them with all the
‘ necessaries of life, and giving them the same provi-
‘ sions they eat themselves. A prisoner, on the con-
‘ trary, who cannot bring himself to adopt their me-
‘ thod of living, fares but ill among them. Attempts
‘ made to escape, never fail to draw on the delinquents
‘ such cruel treatment, as often costs them their lives;
‘ involving in their calamity such unfortunate women,
‘ as, calculated by sentiments of humanity, have con-
‘ tributed to favour their desertion.

‘ As all of them are not in a condition to afford so
‘ many slaves as are necessary to look after their flocks,
‘ the rich give their superfluous sheep and cattle to the
‘ poor; who, in return, tend the herds and flocks of
‘ their benefactors. If the cattle of a Kirguese multi-
‘ ply rapidly, he considers it as a secret suggestion to
‘ beneficence, and distributes them largely to his more
‘ indigent neighbours. So long as his benefactor re-
‘ mains in good circumstances, the other is never ex-
‘ pected to make any return; but if his cattle should
‘ be

‘ be stolen, or diminished by contagious distempers,
‘ the person whom his bounty set up, in the time of his
‘ prosperity, restores him what he received, and often
‘ adds to them some of the young produced by the
‘ animals whilst he was the depository of his neigh-
‘ bour’s beneficence; even though, by so doing, he
‘ should reduce himself to the state of indigence he was
‘ in before. This courteous and honourable manner
‘ of disposing of their property, puts numbers of them
‘ above the fear of want; rendering, at the same time,
‘ their flocks and herds, as it were, immortal; for the
‘ more they give away in the time of affluence, the
‘ more abundantly they receive on a change of for-
‘ tune.’

‘ For the homage of the Kirguese to the crown of
‘ Russia, that court protects them against all invaders,
‘ and, in commerce and social life, affords them the
‘ same advantages as to the Russians, gives them the
‘ quiet possession of their country, disturbing neither
‘ their constitution, their laws, their religion nor the
‘ trade they carry on with their neighbours. They pay
‘ no kind of tax or tribute; in short, they are under no
‘ restriction or constraint whatever; but they are bound
‘ to be friendly to all Russians and all nations in alli-
‘ ance with the crown, and consider the enemies of
‘ Russia as their own. To guarantee their obligations,
‘ they send certain principal people (*Amanati*) to
‘ Orenburg, as hostages, who receive an allowance,
‘ stipulated

' stipulated by themselves, of fifteen kopeeks, or
 ' seven-pence half-penny, English, per day, for every
 ' hostage, and five kopeeks for each domestic, living
 ' very well for this small sum. If the Khan goes to
 ' Orenburg, he must first ask permission of the govern-
 ' or, and is then received like a sovereign prince,
 ' a body-guard is appointed him, and the physicians of
 ' Orenburg, are obliged to furnish remedies, gratis,
 ' to such of their sick as apply for them; but, notwith-
 ' standing all this, and in defiance of their homage and
 ' their treaties, they cannot but give way to their cha-
 ' racteristic passion for plunder and rapine; if any
 ' thing restrains them, it is either the armed force, which
 ' Russia, at times, is obliged to employ against them,
 ' the personal interest and advantage they draw from
 ' commerce, or the influence of their chiefs, who have
 ' a juster sense of decency and decorum.'

' We find no school among them, so that a few only
 ' know how to write their language, which is said to
 ' be a dialect of the Tartarian, pretty pure. The
 ' Kirguese have a frank and prepossessing air.' In
 their conduct towards strangers, says *Pallas*, they are
 affable, yet always interested and crafty; even when
 they visit any Russian trading town, they will make
 trifling presents to people, in order to ask them for
 more important ones. ' They have a sharp but not a
 ' fierce look and smaller eyes than the Tartars; they
 ' do not want good, natural sense, are greedy of dan-
 ' ger

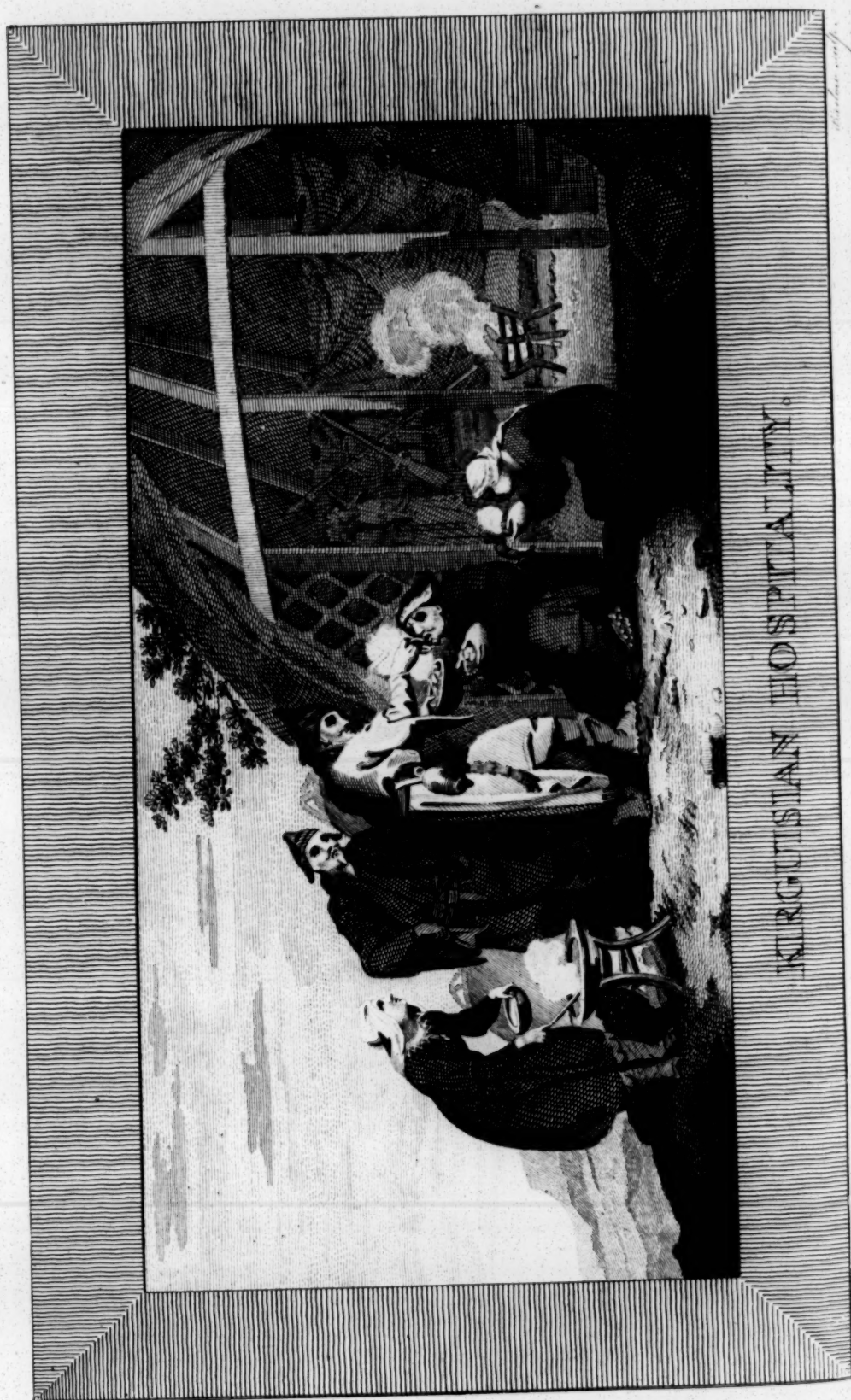
‘ ger and high-spirited ; but, at the same time, fond of
‘ their ease and voluptuous. Their women have the
‘ reputation of being good economists, tender and
‘ compassionate towards their slaves, whose escape they
‘ strive to favour, even by exposing themselves to va-
‘ rious inconveniencies and the rude treatment of their
‘ husbands.’

‘ Armed as the Kirguese always are, they are but
‘ inexpert warriors ; they are, however, good bow-
‘ men, their muskets have no locks, but are fired with
‘ a match ; they cannot discharge them on horse-back,
‘ but dismount, lie on the ground and rest the barrel
‘ of the gun on a fork fastened to it. It is easy to ima-
‘ gine that they, sometimes, meet with an enemy that
‘ has not patience enough to wait for all these maneu-
‘ vres. The instant they perceive that nothing is to be
‘ done, or that they are beaten ; in spite of comman-
‘ ders or military law, every man takes the shortest
‘ way home ; but, when they have to engage with an
‘ enemy as little practised as themselves in the art of
‘ war, they are almost always victorious.’

‘ Their laws are few, but founded on the koran and
‘ the usages of their ancestors. Starchans or elders are
‘ set over the ulusses, and the Khan’s decision is the
‘ last appeal. A murderer, for two years after the
‘ commission of the crime, is at the mercy of the rela-
‘ tions of the person slain ; who, if they can lay hold
‘ of

‘ of him in that time, may put him to death; if he
‘ escapes and is inclined to return home, he may pur-
‘ chase that permission, by paying 100 horses, a slave
‘ and two camels, to the family of the deceased. In
‘ lieu of horses, he may give sheep, five sheep being
‘ equivalent to one horse. He that kills a woman, an
‘ infant, or a slave, pays half the foregoing fine, as,
‘ also, any one that makes a woman miscarry; but in
‘ all these cases the relations and friends of the culprit
‘ endeavour to make as good a bargain as they can
‘ with the injured party, who generally remit a part
‘ of the penalty. Maiming a man is reckoned as half-
‘ murder. For a thumb cut off, the criminal pays a
‘ hundred sheep, the little finger is valued at twenty.
‘ The loss of the ears is such an abomination, that a
‘ man without them, though he should have lost them
‘ in the most innocent manner, is not even tolerated
‘ among them. Whoever commits a robbery on his
‘ countrymen, restores nine times the value. None
‘ are allowed to take an oath in their own cause, and
‘ if the accused can get no brother or friend to swear
‘ for him, he is proceeded against as guilty.’

‘ Their manner of salutation is like that of the Tar-
‘ tars, in squeezing each others right-hand between
‘ both hands, and saying, *Salom malikom*, peace be with
‘ thee! to which the other replies, *Malikom salom*, with
‘ thee be peace! They do not uncover their heads.’
Old acquaintance, however, says *Pallas*, embrace each
other



other with great warmth and cordiality. ‘ After the
‘ first salutations, they present their guests, with the
‘ choicest viands they have. To do the honours of
‘ their house, when they have much company, they
‘ commonly kill a sheep, for making *bischbarmak*, or
‘ the five-finger dish, which is a sort of hash, made of
‘ fat meat chopped and stewed, and is eaten with the
‘ fingers. This stew, they present to their friends by
‘ cramming handfulls of it into their mouths, and the
‘ person whose mouth they so fill, eats it as greedily,
‘ as if he wished to devour the hand that crams him.
‘ When the mouthful, thus given, is too large, the
‘ eater empties half of it into his hands, till he has
‘ gorged the other half, and, after this, swallows the
‘ rest. This honour is done to all the great men of
‘ the nation, when they eat in state, and the same po-
‘ liteness is shewn, by them, to their inferiors, as often
‘ as they treat them; even the Khan himself conde-
‘ scends so far as to stuff *bischmark* into the mouth of
‘ such as are admitted to the honour of dining with
‘ him. If a stranger has for his friend any great man
‘ of the nation, or any private person known to be
‘ rich, he may traverse all the hordes, in full security,
‘ with him, and may trust to his protection better
‘ than to a military escort. Numbers of Russians a-
‘ vail themselves of this disposition of the Kirguese and
‘ carry on very lucrative branches of traffic, under the
‘ protection of some distinguished man.’

The

The property or wealth of the Kirguese consists in breeding of cattle, of which horses and sheep are the most numerous; they have a much smaller number of camels and very badly are they stocked with great cattle, as they cannot live on the steps in winter-time, without being fed. They make use of cows to transport their tents, &c. from one place to another. They have no other camels but those of two bunches. As much as I could learn of the breeding of these animals I did; they bring the male to the female in winter-time, when she is most disposed to receive him. The male being brought, she falls down on her knees, and the male dropping upon his hind-legs and raising his fore-legs quite upright, is above an hour engaged. Like other animals, when with young, the female camel shuns the male, and, if pursued, sets up a roar. They carry their young a whole year, and suckle them for two years; on this account the propagation of camels is exceedingly slow. Wealthy Kirguese keep camels for milk, which is rich, bluish, thick and very pleasant in taste. It is considered as salubrious, never yields any cream and, if sour, is said to ferment better and make a better spirit, than mare's milk. In winter, camels require more attendance and care than any other cattle. They cloath them with felt and rush-mats, and, if the cold is severe, stretch felts and mats between the tents, to shelter them from the weather.

Kirguisian

Kirguisian horses are but little different from those of the Kalmucks, except that they are higher. In wildness and swiftness, they are equal to the former and are accustomed to scrape out their food, in winter, from underneath the snow. They divide their horses into certain stocks; each stock has one stallion; and, such male-colts as are not kept for this purpose, are made geldings. This stallion is as a shepherd to the stock or brood of mares, and keeps them together.

Their sheep are, without exception, the largest and most monstrous of all wool-cattle, they are higher than a new-born calf and so strong and heavy, that such as are full-grown, in a proper season, will weigh between four and five puds, that is, about 180 lb. English. In their form, they resemble Indian sheep, have crooked ram-heads, pouching under-lips, large, hanging ears, and often single or double warts about their necks. Instead of a tail, they have, on the rump, a great lump of fat, which will weigh from thirty to forty pounds, and yield from twenty to thirty pounds of tallow. Their wool is coarse, long and mixed with hair behind. Their colour chiefly brown, or spotted with brown, and some are white. The rams are all horned, so are the wethers; some have from four to six horns, like those of Iceland. The rams are left with the flock during the whole summer, but, from the month of April to October, they bind a felt round their body, to prevent their coupling. During winter,

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they seek their food underneath the snow, and eat the snow instead of drinking. The ewes generally bring forth two lambs at a time, and as there is no disease among them, they are left to the care of nature. ‘The flesh is sweeter,’ says *Tooke*, ‘than that of the common, European sheep, and men of distinguishing palates, perceive in it an aromatic flavour of different, odoriferous kinds of wormwood. The lambs are esteemed so delicate, that a certain number are sent yearly from Orenburg to Petersburg, for the court-kitchen. This sheep is the *ovis laticauda* of Linnaeus.’

‘Lambskins, in this country, are in the highest estimation and make an important article in Kirguisian commerce; they are of various colours, white, black, blue, grey, spotted and fox-colour; the best are waved, shine, as if varnished, and resemble a piece of flowered damask. To increase the quantity of these skins and, at the same time, to render them larger, the Kirguese sew linen about the new-fallen lambs, which preserves the wool sleek and renders it waving. When the lamb is grown so large as to burst the linen, they kill it for the skin.’

They have, also, many goats among their sheep, whom they rear only for their milk. These animals, also, have an odd appearance, being mostly without horns, with long hair hanging neatly about the limbs: their

their ears hang down and their coats are spotted with various colours.

Besides a shepherd-life, the Kirguese employ themselves much in hunting and have, thus, an opportunity of extirpating both foxes and wolves, that are such enemies to their flocks. I have already mentioned, I think, that they train up eagles for this purpose. On the extensive steps, they hunt on horseback. In order to catch antelopes, who, in winter, chiefly frequent reedy districts, they shorten the reeds in particular places, which, as the animal leaps through, wounds him in the belly and renders him easily to be caught.

This nation generally reaches an old age and are, till the last year of life, sprightly and without infirmities. Their most common complaints, are colds, fevers, shortness of breath and the venereal disease, which they call *kowrousaflan*. I could not learn that they were ever afflicted, with those burning fevers so dangerous among the Kalmucks, but the *tschitschak*, or small-pox, has shewn itself among them at times, yet without committing any great ravages. They are, however, so afraid of this disorder, that as soon as the eruption shews itself, they forsake the patient, putting down his food at a distance and leaving him to fetch it; and was a person, in this disorder, to go near any of their tents, they would think themselves justifiable in shooting him.

They bury their dead as do the Mahomedans. The grave is but shallow, in which they lay the corpse full-dressed, cover it with branches and then with earth. At the head, which is always to the north, they put in a stick which is kept perpendicular till the tumulus is raised, beaten solid and completed; this stick is then drawn out and an opening thus left into the grave. In stoney districts, they lay a pile of stones over it. Where is the wonder then that we should meet with so many *tumuli* in all the steps, which must continually increase, especially as they like to bury their friends in such places where some holy men are said to have been buried before, near some metched, or house of prayer, and generally where there are many old graves.

‘ When a man dies,’ says *Tooke*, ‘ they cut his
 ‘ best garment to pieces and distribute the fragments
 ‘ among his friends, who lay them up as memorials
 ‘ of him.

‘ Circumcision, they never omit. The *Abdals*, or
 ‘ circumcisers go up and down through the hordes, to
 ‘ perform this operation on the children of the faithful,
 ‘ and as every one, receiving this professional charac-
 ‘ ter, is obliged to give the abdal a sheep for his trou-
 ‘ ble, these people have always considerable flocks.’

END OF THE SECOND VOLUME.

